

THE AMERICAN AGRICULTURIST.



Agriculture is the most healthful, the most useful, and the most noble employment of Man.—Washington.

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NO. II.

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CULTIVATION OF THE SUGAR-BEET.

WE have no idea that it will ever be worth while to cultivate the beet in America, for the purpose of making sugar; but as a table esculent, and especially as food for stock, we have found it on certain soils, the most profitable root that can be grown. Although it has been extensively cultivated for the last half century on the continent of Europe, its value in husbandry has been singularly overlooked in England and America, and it is not till within the few past years, that it has become one of the general course of root crops. The cultivation of the sugar-beet is now rapidly on the increase, since public attention has been more particularly called to its merits, by a series of experiments made by Earl Spencer and other distinguished agriculturists, on its comparative value with mangold wurtzel, and turneps, in feeding stock; the beet, so far as our information extends, having invariably proved much superior to the two latter roots in nutritive qualities. In addition to its greater value as an article of food over turneps, its yield is equally large, if not larger, acre for acre; and on account of the destructive ravages of the fly, it is a much more certain crop. Mangold wurtzel is an inferior variety of the

beet, and a *coarse tasteless root*, and wherever it can be cultivated, the sugar-beet succeeds quite as well; the latter, therefore, should invariably take precedence over the former, and leave it to become extinct, since it is so inferior in quality to the *improved beet varieties*.

LATITUDE OF CULTIVATION.—Beets may be grown from the equator as far up as the 45th degree of north latitude, but from 39 to 44 degrees is their best range in America. Farther north than this it does not ripen well, and to the south it is subject to be injured by the blister-fly and grasshopper; the summers also are too long and hot for it as a winter crop, and corn and potatoes answer a better purpose; still, if planted as early as garden vegetables in the southern latitudes, it may be brought forward for green food for the stock, about the time that grass gets parched up and fails, and thus answer a very good purpose. We think beets might succeed well among corn, planted sufficiently wide apart to admit a row of roots in the centre. In this case, the corn would protect the beets from the too scorching rays of the sun at the south, and we should think add to their juiciness and sweetness by the shade of the stalks.

SOIL.—The best soil for the production of the

beet, is a deep, light, and moderately rich loam, resting on a clay subsoil; yet, as it has the power of drawing much of the food necessary to its growth from the atmosphere, by means of its large leaves, it will do very well in thin sands, a leachy gravel, or hard clay; a good manuring, however, on such soils would be essential as a preparation for the crop, and frequent stirring of the earth during its growth. A very rich soil, such as the deep alluvials of our river-bottoms, is not a proper one for beets, inasmuch as the roots grow too large and rank in it, and are consequently coarser and less nutritious, and do not abound with as much saccharine matter, as is found in those growing on poorer soils.

PREPARATION.—Plough deep, and roll and harrow the land fine, and throw it up into beds about one rod wide, and if the subsoil be at all tenacious, have the furrows between the beds well hoed out, so as to drain off all falling water.

KIND OF BEET.—The white Silesian is the best variety which we have cultivated, it being the sweetest and finest grained of all others, and to these good qualities, it joins that of producing an equally large crop.

PREPARATION OF SEED.—It is essentially necessary that the seed be soaked *at least three days* previous to planting, and if it be a whole week, it is no matter. This should be done in soft tepid water; and just before planting, roll the seed in ashes or plaster of paris, so as to prevent their sticking together, and facilitate the sowing. The beet seed has a thick, hard pericarp or shell, and till this softens and breaks, it is impossible for it to vegetate; and unless one can be sure of wet weather immediately after sowing, it will frequently not come up at all, or be so long about it, as to be the means of losing half the crop.

PLANTING.—The beet may be sown broadcast like the turnep, but as weeds are likely to spring up in most soils and prevent its growth, and the labor of exterminating them is much greater in this way, it is preferable to sow in drills. For this purpose, the drill-barrow may be used the same as in planting the ruta бага, but the beet-seed is much more difficult to deliver evenly through a small aperture than the turneps, and though we have used a great variety of barrows for this purpose, we have never yet had one that worked well and could be depended upon, especially in tenacious or heavy loamy soils. It is preferable, therefore, to take a piece of joist four inches square, or a round stick of the same diameter, half or just as long as the lands are wide, fill this with iron or wooden

teeth in wedge shape, as far apart as you wish to have the rows, put a pair of fills to this, and hitch on a stout man or steady horse, and passing once or twice over the land, completely drills it from one to two inches deep. Then follow immediately with the seed, dropping it by hand, or from a long necked bottle, or tin cup with a hole in the bottom, and a handle attached to it, shaking the cup or bottle as you walk along, and following sharp with the eye to see that the seeds are evenly dropped. Faithful children of ten years old, can do this with more ease and facility than grown persons. As fast as dropped, cover with the hoe; in heavy soils about half to three fourths of an inch deep, in sand or light gravel twice this depth.

The rows may be from two to three feet apart for a field crop—two and a half to three feet is the best. This distance enables one to use the cultivator for weeding, without danger of cutting or covering the plants by the dirt being thrown up as it passes through the rows. The product is not so great per acre from wide rows, but land being cheap and labor dear in America, we must study to facilitate manual operations, at the same time that we have some calculation to a good yield. Four pounds of seed per acre is generally considered enough, but it is better to have a dozen extra plants to thin out, than to be obliged to transplant one. Those transplanted do not thrive *half as well* as those that remain where they vegetate; besides, the labor of so doing is more expensive than extra seed and time of thinning. We therefore mean in sowing to have a good seed dropped as near as every two or three inches in the drills.

AFTER CULTURE.—As soon as the weeds begin to appear, run the cultivator through the row and follow with the hoe. It is very essential that the ground be kept clear of weeds, especially for the first two months, and three hoeings with the use of the cultivator are generally sufficient for the season. As the plants attain a height of about three inches, they should be thinned to a distance of about four inches, leaving the strongest and healthiest; then during the season as they grow, gradually thin out the remainder, leaving the roots in the rows at least about nine or ten inches apart. If left too thick, they shade and choke each other in growth, and the product is not so great as when well thinned. These thinnings are valuable to feed to stock during the summer, and are frequently considered equal to half the expense of the cultivation of the whole crop.

HARVESTING.—When the leaves begin to decay and turn yellow, is the best time to gather the

beets, for if left longer than this in the ground, the roots grow hard and strong, and do not yield so great a per cent. of saccharine matter. This of course will take place earlier or later in different climates, and is undoubtedly as good a rule as can be given, it being adopted after a strict chemical analysis of the beet in its various stages of growth. If the soil be light, as the roots generally grow so much out of the ground, they can be pulled up by taking hold of the tops with the hand—but if more tenacious, the dung-fork is the best instrument that we know of for digging them. Let part of the hands be at this operation, and the other part follow with large knives or bill-hooks; taking up the root with one hand, top off the leaves with the other, and toss the roots into small heaps to dry through the day, and if left out over night and there be danger of frost, let them be lightly covered over with leaves or straw; a hard frost injures the roots, and makes them more liable to decay. They may then be taken to a well-ventilated cellar, or be pitted in heaps of 100 to 200 bushels. The beet is rather apt to heat and commence sprouting if thrown into large heaps, or packed away in the cellar. If put in the latter place, any other roots except the turnep may be placed at the bottom, and the beets on top, and if in pits the same roots or straw in the centre. All the beets then have a good ventilation, and an opportunity of throwing off the impure air; and to facilitate this, after covering the heaps with dirt, holes should be made every few feet on the top of them, and wisps of straw be placed in such holes. In this way we have experienced no loss or deterioration in the value of the root, but have preserved them till May, as fresh, sound, and sweet, as when first taken from the ground the preceding fall. In a climate as far as 39 degrees south, they might be preserved all winter in tolerable tight sheds and barns.

FEEDING.—Throw them on to the ground or floor, and take a hay knife or spade, and a man will slice up a bushel a minute sufficiently fine to prevent cattle choking on them. The best way to cook them for stock is by steaming, but they can not be kept so over two days in warm weather, and a week in cold, without undergoing a fermentation, and losing the saccharine matter so grateful to the taste and so essential to nutriment. Either raw or cooked, stock frequently prefer them to meal or corn. Raw, we think them as nutritious as any root whatever, and as far as our experience extends, three bushels of beets with neat stock, is equal to one of Indian meal. Hogs demand less bulk to fill themselves than cattle, and perhaps their value

to them would not be in as great a proportion.

PRODUCT.—Four hundred bushels is a fair yield in field culture, but six or eight hundred per acre is about as common. We have grown at the rate of 1,300 bushels to the acre on a hard clay soil, and our average field product is usually 600 bushels. We have heard of 3,000 bushels being produced to the acre on rich loams. The roots will frequently weigh from 17 to 20 pounds each, and 10 pounds is not unfrequent; now admitting this last weight to each root, and that seven rows stood in the width of a rod, which would make them about two feet apart, and the roots one foot apart in the rows, and allow 60 pounds to the bushel, we should have the enormous product of 3,080 bushels to the acre, but roots so large are coarse, stringy, and not unfrequently hollow, and have much less saccharine matter in proportion to their bulk, than smaller ones. Those of about 5 pounds weight are far superior; and these standing one foot apart in the rows, and five rows in the width of a rod, making them about three feet apart, give the large yield of 1,100 bushels per acre, which is quite as great a product as it is desirable to strive for, and upon the whole, perhaps the most profitable.

RAISING THE SEED.—There is as much in choosing proper roots for this purpose, as in selecting animals to breed from, and the same general rule holds good in both cases—a medium size and fine true form. Roots weighing four to six pounds, and of four to six inches diameter at the top, and nine to thirteen inches long, and smoothly and evenly tapering to a point, without straggling branches, and of a creamy white color and smooth grain, are the most desirable. “Like produces like,” and with such selections followed up, the crop will soon run evenly of the same shape and size as the roots from which was grown the seed. Plant out the seed-roots about the 1st of May, three feet apart; and as the stalks grow, set small stakes round them in a circle, and tie a cord from stake to stake for their support. When the seed shells easily, which if planted in May, will be in September, is the proper time to gather it. It ought to be spread out a few days on the floor of some high, dry room, or on boards in the sun till well dried; it may then be packed away in boxes or barrels, or be put up in bags. We have generally found this essential to a proper preservation of all seeds. If not well dried before packing, they are apt to heat and mould, and lose their germinating powers. Two or three dozen roots will grow seed enough for acres, and at one tenth the cost usually asked for

it at the seed-stores. When grown at home, one knows what he gets, and as it comes to him abundantly and cheap, he can, without grudging, give to his neighbors, and thereby greatly promote the culture of this most valuable of roots.

A RURAL WALK IN THE CITY.—No. II.

NURSERY OF MR. REID, ON THE FOURTH AVENUE, BETWEEN 34th AND 48th STREETS.—These are charming grounds, situated on Murray's Hill, and command one of the most delightful views to be found on the island; and very sorry were we, that the vegetation was not sufficiently advanced, to show the scenery to proper advantage—but we shall make amends in future visits for all this. The grounds contain 12 acres, are in form of an oblong square, and are enclosed by a good honeylocust hedge and stone walls. The soil is of a clayey loam, and is particularly well adapted for a healthy growth of trees and shrubs. The walks cross each other at right angles, and the borders all along the principal ones are planted with flowering shrubs, which will soon be in bloom, and continue so in varied succession during the whole season, thus making them the most delightful of promenades.

The nursery part is well filled with the various kinds of fruit-trees common to our country, and we were informed that it is particularly rich in all the new varieties of pear and plum, which are found quite superior to the older sorts. Mr. Reid devotes most of his time to this department; attending personally to all the budding and grafting, and will guarantee for the correctness of what he sells; for he has specimen trees in bearing of all from which he cultivates, and this is certainly the only safe method for any nursery-man to pursue, to be certain that what he sells is precisely the thing represented. Frequent mistakes have hitherto been made by some, which have given much dissatisfaction, and been the means of preventing many an after order, of fruits, shrubs, and flowers, in consequence of such disappointments to the purchasers.

We found Mr. Reid busy in making experiments from seeds of different kinds, and from these he has growing some quite distinct varieties of the Isabella, and Catawba grapes, which he expects will bear this season. He has also a number of seedling cherries, and has raised a curious variety of the peach, growing only about two feet high, with branches drooping to the ground like a weeping willow. It has not yet borne fruit, and he merely mentioned it to us as an ornamental tree, and only recommends its cultivation as such, till

he ascertains what it will produce. The ornamental trees and shrubs are of numerous varieties, and of suitable sizes now for transplanting as shade trees in the streets and parks, or private grounds.

The green-houses here are five in number, making ranges altogether, of 280 feet. They are well stocked with the usual variety kept on sale for the New York market.

GREEN-HOUSE OF MR. BALL.—Crossing from Mr. Reid's over to the Bloomingdale road, we found Mr. Ball prettily situated with an acre and a half of garden ground around him, and several long ranges of green-houses in fine order. All these have double roofs, which Mr. B. prefers in consequence of their giving more heat and light than the single roof, and at a time when most wanted. One of these conservatories is about 20 feet wide, and 125 feet long, and as we entered, it presented a most splendid and gratifying sight in the flower way, for it showed a wide centre row, and two deep side ones, running the whole length of the house, and filled entirely with masses of magnificent Camellias in full bloom. In another range 75 feet long, we found quite a variety of other plants, prettily arranged, and as well as we are capable of judging, cultivated with care and attention.

NURSERY AND GREEN-HOUSE OF MR. MANTEL, 46TH STREET.—Just below Mr. Ball, on the same road, are the fine grounds, embracing four and a half acres, of Mr. Mantel, recently settled here from France. He imported most of his fruits from the best nurseries in Europe, and among others, a great variety of pears from the celebrated Van Mons, in Belgium. These are generally grafted on quince stocks, and come forward much sooner than in the ordinary way, but of course are not so long lived. To those who want their fruit quick, or standards for grafting, we would recommend the dwarfs of Mr. Mantel. He exhibited nearly seventy varieties of pears at the Fair of the American Institute last October, and was quite successful in obtaining premiums. We like the pyramidal form of training trees adopted here for small gardens, as they take up much less room than the usual way; and we are of opinion that the fruit they bear is better, though this may be a matter of mere fancy. We should think there were ranges altogether of at least 250 feet of glass here, and the most numerous shrubs we found in them, were roses and oranges. One entire range was devoted to the latter, principally of the dwarf kinds, and such as are most suitable for parlor cultivation.

GARDEN, NURSERY, AND GREEN-HOUSE OF MR. HOGG.—Pursuing our course towards the city, we

soon came to one of the oldest and most favored establishments in New York; for well do we recollect, when residing on Bowery Hill years gone by, of often wandering here, and over the picturesque grounds in the neighborhood. It was then a charming country spot all around, and many are the happy hours we have spent with those whom we shall never see again in this world, gathering wild flowers in the meadows, and beautiful cultivated ones in Mr. Hogg's garden. Now the populous town has advanced almost over the whole of this space, and the neighborhood is completely disfigured by newly-opened streets, the digging down of charmingly rounded hills, and the filling up of wild ravines, bringing everything to a general level for the purpose of building. We like to see our country increasing in population and wealth, but it makes one melancholy to wander over the favorite scenes of boyhood, and witness the horrible cutting up and devastation, that such "improvements" make among them. Yet they put money in somebody's purse, and this is the all-engrossing thing, now-a-days, so we suppose we must not complain.

The corporation has so plundered Mr. Hogg's grounds in the way of streets, that he has barely one and a half acres of land left for his garden. His ranges of glass, however, are extensive, full 350 feet in length, and abound with a large collection of shrubbery, flowers, and herbaceous plants; comprising all the well-known old sorts, together with anything new and fine that may be introduced into the country. This article is already extended to so great a length, that we can not particularize, and merely mention the appearance and size of a *Franciscea undulata*, standing four feet high, and in full bloom. In addition to these grounds, Mr. Hogg has ten and a half acres at Yorkville, a few miles from the city, full of all sorts of shrubs, and fruit and forest trees. Of the fruit-trees, Mr. H. has planted out quite a number, on purpose to test the various specimens which he cultivates.

SEED-STORY AND CONSERVATORY OF MR. BRIDGEMAN, ON BROADWAY NEAR 18TH STREET.—After Mr. Thorburn's and Mr. Smith's, this is the oldest establishment in the city; and it may be sufficient for us to say, that it abounds with a fine variety of all such things as may be wanted in this line. Roses and geraniums are the chief ornaments of the conservatory, of which there are two hundred varieties of the former, and sixty of the latter. We saw a fine *Chorozema*, a rare plant from Central America, and could not but admire the bright blending of the orange and red in its charming flowers.

Mr. Bridgeman is quite an author, having published several works on Horticulture, and the management of green-house plants, which he was so kind as to present to us. These volumes are eminently practical and worthy of public confidence, and we respectfully recommend them to the attention of our readers.

GREEN-HOUSE AND GARDEN OF MR. MONK, 4TH AVENUE AND 30TH STREET.—We neglected at the proper place, to speak of Mr. Monk's flower-garden and conservatory, which we found just this side of Mr. Reid's nursery. These he has recently somewhat enlarged by the addition of two lots, and 50 feet more of glass; making his surface now under cultivation about one acre, and the whole range of green-houses at least 400 feet. He has about 4000 camellias, and a large supply of geraniums, heliotropes, verbenums, and roses. Many of these last were in full bloom when we visited the establishment, and made a fine display, especially the beautiful, rich red *Agrippina* or *cramoisie supérieure*. We also much admired the yellow tea rose, though we do not know why it should be called *yellow*, for it much more resembles a light cream color. These shrubs are of large size, and were full of buds and flowers, and we took good care to appropriate to ourselves a fine bouquet of them and the *Agrippina*.

Mr. Monk has recently made the experiment of grafting numerous varieties of the tender foreign grapes upon *Isabella* stocks, and is cultivating them by the inarching system. The reason for grafting these foreign sorts upon the *Isabella* is, that the latter is a hardier stock, and flourishes better than the former on a wet or poor soil. The green-houses here are built with span roofs; that is, with glass on both sides, and are preferred for the same reason as stated by Mr. Ball, and they save much in bottom heat.

In the garden we noticed the native rhododendrons, flourishing finely in the open air. They are planted on the north side of a high fence, and have a line of houses beyond to break off the wind; and thus protected from the hot sun of summer, and the cold blasts of winter, they grow well, and flower abundantly. It is a magnificent shrub, and we wish more attention was given to it, not only in the native, but in the improved hybrid varieties. One ornament of the garden we found here that we have no recollection of before seeing. It is a succession of boxes with soil in them, placed one on top of the other, gradually lessening in size, and thus forming a sort of pyramid. From these may be seen *ptunias* and *verbenums* completely envel-

oping the stand, and in full flower all summer—thus forming a charming embellishment to the grass-plot or border.

It was now quite dark, and thus ended the Rural Walk in the City. We have doubtless omitted to mention several establishments unknown to us, and if so we shall be pleased to have our attention called to them hereafter. Sufficient, however, we trust, has been said, to give the reader who may have had patience enough to accompany us in our long ramble, an idea of the extent of the nurseries, gardens, and conservatories, in the vicinity of New York. We shall have something to say in our next of the fine farms in this neighborhood, several of which are cultivated on the most approved principles of scientific agriculture, and are models deserving the study of all engaged in these pursuits.

THE DAHLIA.



(FIG. 7.)

As May is the season above all others of flowers, we have thought we could not do a greater favor to our fair friends, the ladies, than to introduce to their notice the dahlia; which if it were fragrant like the rose, would at once become the queen of flowers. It was first discovered in 1789, by Baron Humboldt, then travelling in Mexico, and sent by him to Europe, whence it has been disseminated over the whole civilized world. It is of large size, and of every variety of color, from the pure white up to the deepest purple. It may be propagated either by seeds or roots, and some assert successfully by cuttings from the lower part of the stem. We have only tried the two former methods of growing it, and in these we have been quite successful. It is a hardy plant, and has done best with us on a soil of rich clay loam, and during those seasons that moisture and cool weather most

predominate. We found the dahlia usually of a larger growth in England than in our own country; but whether owing to the superiority of the cultivation there, or the greater humidity and coolness of the summers, we were unable to decide. We suspect, however, that both of these causes had their effect in adding to the size of this magnificent flower.

SHADE AND ORNAMENTAL TREES AND SHRUBBERY.

These delightful appendages to our dwellings, farms, and towns, we are of opinion will never be out of fashion so long as civilization exists among us; and as they are so easily propagated, and in this country so cheaply and readily procured, nothing short of a want of taste, or absolute sloth, will prevent the proprietor of his estate, be it either a city or village residence, or the more ample domain of a farm or plantation, from their culture. No exotics which have yet been introduced into our country are superior, if at all equal, to the indigenous forest-trees of America. The Elm, the Maple in all its varieties, the Sycamore or Button-wood, the Oaks of the northern and middle states, the India-tree, the Cotton-wood, the Magnolia, Cypress, and other trees of the south, to say nothing of the numerous lesser, yet equally beautiful varieties scattered all over the country, are not surpassed, if indeed they are equalled in any quarter of the world.

There are few objects we more admire than a beautiful tree; and we had any time rather set one out, and give it a good start and a kind blessing, than to eat—unless by accident we may have previously pretty long fasted; and as the proper season has approached in which they should be planted, we propose to give a few plain directions on the subject.

THE SELECTION OF THE TREE.—If not grown in a nursery, they should always be taken from the open ground where they have come up in a second growth, and become inured to the sun and wind, and drought. If such are not to be found, it may be as well to let them alone, for a tall spindling tree from a dense forest will not grow. In raising them from the earth, care should be taken that the roots be as little bruised and torn as possible, and if the soil incline to adhere to them, let as much of it be attached as convenient. Do not suffer them to remain any length of time out of the ground; but if this can not be prevented for some days, let them be well covered from the sun and wind, and kept moist. Let the holes, wherever they are to

be set, be dug as broad as a large wagon-wheel, and at least two feet deep. No matter if it be a little more labor, it will doubly pay the expenses in the increased growth of the tree in two years. Then throw in some good earth for a bed on which the roots are to rest, and if that thrown from the hole be not rich enough, let some be brought from elsewhere. Good rotted sods on top soil is the best; by no means use *fresh* manure, for good earth is better than any manure, even if well rotted. Fill the hole for the tree sufficiently high with earth, so that when planted it will stand as deep as before it was removed, or at any rate not more than two inches deeper. Before setting it out, cut off the bruised and mangled roots, and thin out the top moderately, and shorten the branches so as to give it a well-fashioned head; but by *no means* cut them off altogether, unless the stem be long, and the top so high as to endanger its being blown over; in which case nearly or quite the whole top may come off. This, however, is a bad practice, and always retards for some years the growth of the tree, and frequently is fatal to its life if it be large; short and stocky trees, therefore, are the best, always having roots in proportion to the head.

When the tree is properly trimmed, stand it upright on the soft earth prepared for it in the hole, and let a hand with a shovel throw in a light covering of good earth upon the roots. Sway the tree gently back and forth to settle the mould among the roots, and when finished, tread the ground firmly around the trunk. Then lay the surplus soil well up, flattening the top like a basin to hold the rain that may fall, or the water that you may place there to save it from drought; finally, stake and protect it, if necessary, and you will not lose one tree in twenty that is thus planted. The extra labor thus expended is not equal to taking up the dead trees, and replacing those that would otherwise die from careless or insufficient planting; and besides, your trees will gain rapidly on the otherwise poor, stunted, and feeble things that are set in the usual method. Last spring we planted thirty-two sycamore or buttonwood trees in this manner, on a hard and hungry clay soil, with good fresh earth brought in and placed about the roots. The trees were about three inches in diameter near the root, and every one lived and made more or less healthy new wood during the summer, although it was a season of severe drought, and no water was carried to them. The whole expense of taking up the trees, and digging the holes, and planting, was less than thirty-five cents each. On

these principles of digging up and planting, fruit-trees and shrubbery of all kinds may be removed with perfect success. We have transplanted hundreds, and when carefully done, with little loss; and if these simple rules are followed, three fourths of the trees now annually lost from careless planting, would be saved, and make a rapid growth. If any one doubt the superior efficacy of this method, let him try it side by side with the plan usually practised, and he will be convinced of its superiority.

Several friends who have been building fine and costly houses in town, with ample enclosures in front, and who have annually planted shade trees in them for several years, wonder why they do not grow! We have told them; but they are too careless, or do not give sufficient attention to the subject to understand it, and still they continue to repeat the old process. It was only the other day in passing one of their places, we saw a hole dug, and a man with a large, long, spindling tree on a cart, with a great ball of earth *froze* to the roots, which were cut off all round to *fit* them to the *capacity of the hole*—not the *hole fitted to the roots*, and a long sweeping top. Very well, we thought, go on and plant it! but two to one the tree will die; yet the experiment will probably be repeated again, for years to come, as it has been for years past, at the rate of a dollar per tree, until the exhausted proprietor exclaims in his despair, that the worthless soil will never *bear* shade trees!

COTTAGES.

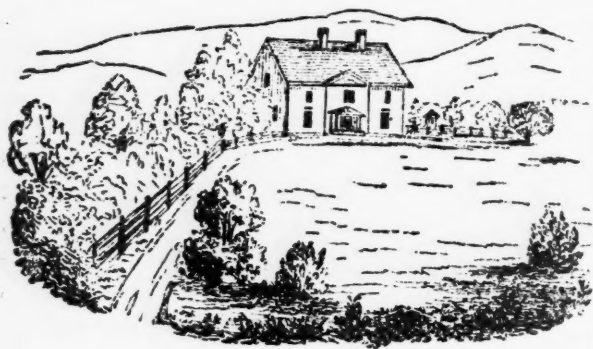
We here give two cuts of cottages, one in the plain, and one in the ornamental style. We do not subjoin the ground plans, because every one in building chooses to have his own arrangement of rooms, calculated for his own particular locality, comfort, and convenience. Figure 8 we most ad-



(FIG. 8.)

mire. It is something like the tasteful English cottage *orné*, a style of building which we hope hereafter to see scattered over the country, if for

no other reason than to give variety to our architecture. We think the large ample roof particularly necessary in our hot climate, to shade the walls and windows from the fervid sun. It is also the best roof to throw off the deluging rains that frequently fall here, and it assists greatly in keeping the walls dry, no small comfort in country houses, especially when built of stone or brick.



(FIG. 9.)

But as we have expressed our opinions pretty freely on this subject this month, under head of Editor's Table, in noticing Mr. Downing's late publications, we will not enlarge at present. We hope, however, in planning for country residences, more attention will be paid to the grounds that surround them; for we think, so far as ornament is concerned, these are of more consequence than the family residence itself. What can be more incongruous than a fine house, standing naked and alone, on rough, uneven ground, destitute of verdant shade and shelter, and surrounded by a miserable coarse fence? We prefer a log hut, with basswood chinking and mud plaster to such, for then everything is in keeping.

MANAGEMENT OF BEES.

We have had some experience in bees, and spent many agreeable hours watching their habits and movements, and always found ourselves wiser if not richer in the result of our observations, besides enjoying the sweets of their labors. We have also seen and read many treatises on this most intelligent and curious of insects; written with much ingenuity and patient research, yet to be frank, we confess that we are not altogether settled in opinion as to the best plan to pursue in regard to them. There are certain rules, however, to be observed, without which no one need expect to succeed well as an apiarian, even in propagating bees, if he *destroy* them to obtain the honey. The situation in which the hives are placed should be dry, pleasant, and shady. If in a bee-house, it

should be roomy and well ventilated, and open to the morning sun. The hives should be made of thoroughly seasoned pine, basswood, whitewood, or black walnut planks, not less than one and a half inches thick. This is necessary in our northern climate to keep up a regular and proper temperature, avoiding thereby the extremes of heat in summer, and cold in winter. It is said, too, by many apiarians, that bees make their comb during the night; and if so, the hive should be thick enough to retain the mild temperature of the day, through the chills of night-fall. Let the hive be put as close together as it can be, to prevent the bee moth from depositing its eggs or nit in the crevices, for these are sure destruction to the swarm. The size of the hive should be about that of a bushel, or to measure inside a cube of 14 inches.

This is our starting point, whence we may branch out into a dozen different models of hives: some with the drawer, or box plan of Mr. Weeks; others with adjoining apartments like Dr. Thatcher's; others still, with a subtended contrivance according to Mr. Affleck. Again, the house, or colony method has had its advocates—while many, and those by far the most numerous, insist that the *old* way of keeping bees in a crazy house, or no house at all, but anywhere on old benches, stumps, or stools, in a rickety open hive, either of wood or straw, and to murder the bees with brimstone, and rob them of their honey, is the best of all; this last, however, we do not subscribe to. Were it not for the bee-moth, little trouble would be experienced in propagating bees in either of the methods mentioned; but as that affliction to the apiarian is universal in our country, no successful course can be followed, unless, we guard effectually against its ravages.

Our experience impels us to lay down this postulate: that but one queen or mother bee can exist in any one community for any length of time, and therefore, that the swarm can be only augmented from the increase of this female. It follows then, that if the colony be overpeopled, or very numerous, it can not increase above its existing size; for the queen, or her successor can lay but so many eggs, and that number can only keep good such as are lost by accident or die naturally in the colony. Of course the chamber or house plan can only grow to a given size, and never swarm. This plan, too, is otherwise objectionable, as being the least productive and profitable method; liable to occasional accident, or loss of the whole, besides the depredations of the moth, which will, maugre

all preventives, and no matter what the situation, without continued personal attention, be at once among the thickest of the hive. All this we have proved over and over again. This system, therefore, after a thorough trial, we dismiss as unprofitable and hazardous.

Our preference is decidedly for the smaller hive. In the exact fashion of this we are not particular, so that the above-named requisites, viz., warmth and tightness be secured. We may also add, that we prefer entire simplicity, for bees do not understand complex habitations. But as the discussion of the different modes of treatment, and manner of taking the honey, will lead us into an elaborate essay on the whole subject of the domestic habits and economy of the bee, we must defer it till a future time, promising, however, that we will duly introduce to our readers the best information we have at hand. In the mean time we shall be glad to receive communications from those who have had experience on the subject.

Tour in England. No. 13.

EARLY LAMBS.—Among the table delicacies that the wealthy part of the population in this country greatly relishes, and seems very willing to pay for, are meats somewhat out of season; and the kind which is supplied with the most care and abundance, and that is most permanently relied upon in market, is early lamb. The breed of sheep for a long time exclusively used to produce this was the Dorset; deriving their name from the shire in which they were indigenous, and where we understand the business of this early breeding first commenced. The production of early lambs now is no longer confined to Dorsetshire, or its peculiar sheep, but it has become quite common throughout the southern counties of England. Among other breeds used for this purpose, the South-downs are the greatest rivals of the Dorsets; and we must confess, that we think them possessed in a superior degree of those qualities best adapted to early breeding.

The Dorset is a delicate sheep, and horned; with white face and legs; flat, thin carcase, and rarely weighs over 75 to 80 pounds dressed, when full grown, and the wethers do not fully mature till two and a half or three years old. Its fleece also, is of light weight, and the wool not above a middle quality. Its meat is pronounced superior. We may be unfortunate in our taste, yet in no instance did we find it to excel the well bred South-

stances. The South-downs, then, being hornless, hardier, of better shape, and maturing equally quick, in breeding early lambs for our own country, we should much prefer their introduction for this purpose to the Dorsets. It may be thought that the South-downs would not take the buck equally early; but the contrary is the case, for they can be brought to it without the slightest difficulty, as the breeders in Middlesex and Berkshire informed us, and they are now quite successful in the production of early lamb, and for a preference retain the South-down breed.

The usual period fixed upon for the ewes to lamb for the early market, is during October and November. They are then ready for the butcher about Christmas time, and so continue during the whole winter. They are usually killed at eight to ten weeks old, their meat being considered the most delicate at this age. When they first appear in market they bring extravagant prices, sometimes as high as 4 or 5 guineas, and never less we believe, than 30 shillings to 2 guineas each, which would be equal to 50 cents or 1 dollar per pound for the meat in our money, which upon the whole, amply pays the breeder for his extra care and expense in rearing these delicate house lambs.

Previous to parturition, the ewes are usually taken up, especially at night, and during rain storms, and kept in well littered folds or yards. After lambing they are driven out every morning to the pasture, and brought back in the afternoon, and thus remain with their young till the next morning. If the ewes are turned out quite early in the morning, they are brought home to suckle at noon, and then again in the evening to remain all night. In addition to their pasture, they have what green food they will eat during the time they remain in the fold-yards; such as clover, vetches, and rye-grass. As soon as cold weather approaches, and they can no longer run in pasture, in order to keep up a full supply of milk in the ewes, they are high fed with the best of hay, turneps, or other roots, and brewers' grain. The lambs also are taught to drink cow's milk as soon as they can make them, and the quantity of this that they may safely take after they are a month old, is about one pint a day. This brings the lambs forward much faster than when dependant upon their dams alone for their nourishment, for it not unfrequently happens by this process of feeding, that they are ready for the butcher at the early age of six weeks. To ensure greater certainty in rearing these lambs and accelerate their growth, it is best to have them comfortably shelter-

ed in houses. These are airy and well littered, and so roomy that the lambs can frisk about in them, and take all requisite exercise. This is not only necessary for their health, but ensures a better quality of meat. Any animal kept in close confinement during the fatting process, is sure to be attended with more or less fever, which injures the quality of its flesh, and often makes it positively unhealthy.

We have often thought that the rearing of early lambs for our own markets in the United States, might prove a profitable business to those who would engage in it, especially on the Atlantic borders from New York to Maryland. This section of the country enjoys a tolerable mild winter climate, and embraces within its boundary three large cities, besides several populous towns, the inhabitants of which are both able and willing to pay a good price for delicate meat, which is brought there somewhat out of the ordinary season. Lamb does not usually appear in the New York market till April, and even then it is of an indifferent quality; and yet it sells readily for one dollar a quarter, equal to 15 to 20 cents per pound, and even when more plenty in May, it is worth full 10 cents per pound. Surely these prices would pay our breeders well for a little extra attention in providing this wholesome and delicate meat for our markets. We now have a good many South-downs scattered over different parts of the United States, and they can be obtained at moderate prices; and for the production of early lambs and good mutton, we would especially commend them to the attention of our countrymen. Those who can not afford to purchase a flock of full bred, may at least procure bucks, and by judiciously breeding them to native ewes, they may soon possess a very useful sheep, and the right sort to give us choice mutton and delicate early lamb.

THE TIMES, AND PROSPECT OF THE PRICE OF AGRICULTURAL PRODUCTS.

In the January No. of this paper, we gave a short article on the prospects and price of agricultural products, and a few reasons which induced us to believe, that there would be a rise in their value; and lest some of our readers may not have the number at hand to refer to, we briefly repeat them. The winter thus far had come upon us unusually early and severe, and there was every appearance of its continuing so; that it would probably be followed by a cold, late spring, and that there must consequently be a much greater consumption of forage than usual; that the passage

of the late tariff would enable our artisans to resume their manufactures to a greater extent than heretofore; that the modification of that of Great Britain would permit considerable exports of provisions; and that finally, money would become so abundant, and to be had at so low a rate of interest, as to induce capitalists to make such investments as would ensure the undertaking of new enterprises; and thus, notwithstanding the late abundant harvest, our farmers could henceforth look to more cheering prospects.

Well, a winter of unexampled severity has passed; a cold frosty spring is upon us, which we fear may continue to the end; and the corn in most instances all through the south has been cut off, and a second planting been necessary. In many parts of the country, especially at the great west, after consuming all the forage, thousands of cattle, sheep, and swine, have actually perished by starvation. It is stated that full one third of the flocks and herds have died in Michigan, though we think this an exaggeration. Now all these things must necessarily have an effect upon prices, and however favorable the harvest of the coming season may be, we doubt whether produce will be any lower than it now is; for, notwithstanding the great crops of the past year, all that has come forward has been rapidly shipped or sold, and our markets now are left comparatively bare. We can not hope for the abundant crop in all things that we had last season,—it was literally a year of abundance, and such as does not often occur.

For the two past months, Flour and Provisions have been steadily advancing in price. Cotton, after falling to one cent lower per pound than it was ever before known, has at length taken a start both in England and this country, and we should not be surprised if within three months, it were half, to one cent higher than at present. Certainly it must be, if the season does not assume a more favorable aspect; for the recent attempts at cultivation of this great staple have signally failed in India, and Europe must still look to the United States for its supplies of the middle and better qualities. The rise of cotton will affect other products more or less; so that with the present superabundance of capital, both in this country and abroad, we are satisfied that we are now entering upon a new career of prosperity, and that business generally will have assumed great activity by September next.

Several of the states seem determined to prosecute their internal improvements under any circumstances, and contracts are now making public-

ly and privately, for building railroads and digging canals in various sections of the Union. These enterprises, together with a fuller prosecution of manufactures, will divert some of the labor which for the last five years has been engaged in raising produce, to be the consumers of it; and to conclude, everything presents a much more cheering aspect to our mind. We may be over sanguine in our hopes and expectations, but we confidently think that the day of darkness is at length passed, and that we may now look forward to a bright series of years of steady, active, profitable business.

HENRY COLMAN, Esq.

THIS distinguished American farmer sailed from this port on the 7th of last month, in the packet ship Independence, on his long-cherished agricultural tour to Europe, and has by this time, in all probability, arrived in England. We wish him a pleasant sojourn among our brethren of the father land.

Mr. Colman has long been our warm and honored friend; and in this responsible undertaking of an agricultural survey of the most interesting parts of Europe, he has our best wishes of success. That his tour will add invaluable stores to the agricultural knowledge of our country, we can have no question; and of his ability to prosecute all necessary inquiries, and obtain all useful knowledge for the benefit of American agriculture, we have scarce a doubt. To the brief notice which Mr. Colman has given the public of his intended tour, he has received a most substantial response, in a subscription of over two thousand copies of his proposed publication; and in this, from his ability as a scholar and his long experience and observation as a practical farmer, we anticipate a rich and rare treat in his volumes.

We expect to be regularly advised of Mr. Colman's movements during his absence, both in Great Britain and on the continent, and shall occasionally place his communications before our readers. His prospectus was given in our March No., page 366, and subscriptions to it will be received at our publishing office, Messrs. Saxton and Miles having been appointed the agents for this city. The first number of the Tour and Survey, comprising about 100 pages, will appear early in January next; and during Mr. Colman's absence in Europe, in order to ensure as much accuracy as possible, the proof sheets will be read by J. E. Teschemacher, Esq. of Boston, and ourselves.

MERINO SHEEP.—Several of our friends are going into the sheep business at the west, and wish us to make the inquiry at what prices one hundred pure-bred, choice Merino ewes can be had, delivered either at some port on the lakes, or on the Ohio river. We understand that there are fine flocks of pure, well-bred sheep in Washington county, Pennsylvania, and near Steubenville, Ohio, and we should be pleased to hear from their owners regarding them. Bucks will be taken from

this part of the country, as it is thought that they are larger, stronger, and better bred, than at the west. We shall expect to be addressed *post paid* in all instances when making inquiries for others.

SAMPLES OF WOOL.—We are repeatedly called upon, especially from the south, for samples of different kinds of wool, and we shall be obliged if our friends will furnish us a few, especially of Merino, both washed and unwashed, neatly arranged in separate locks on white paper.

POLAND HENS.—We wish to know where we can obtain in this vicinity, the genuine Poland hen, of different colors and free from the muffed chop-cross of the French Poland. Any other curiosities in the poultry way, we should be glad to learn about. State prices at which they can be obtained in pairs.

CINCINNATI HORTICULTURAL SOCIETY.—We are happy to see this society organized under such favorable circumstances, and return our thanks to the president and members, for being elected an honorary member thereof. It will give us great pleasure at all times to assist in promoting its laudable objects.

CREDIT QUOTATIONS.—The Southern Planter will find upon re-perusing this article, that the N. E. F., and not itself was the party in question. We have ever found the S. P. particularly scrupulous in giving credit for extracts. And while upon this subject, we notice some papers are in the habit of copying our Foreign Agricultural News, without giving us credit. We are always happy to see these things quoted, but as we make up the summary at considerable labor and expense, if the source from which it is derived can not be acknowledged, we shall hereafter mark the offending parties, and make their names public.

TO OUR SUBSCRIBERS.

We can not but feel grateful for the prompt manner in which nearly all who supported us last year, have come forward and renewed their subscriptions for the present volume of the Agriculturist. New subscribers are continually flocking in, and every one seems pleased with the elegant mechanical appearance of our new volume, and its varied and racy matter. According to present appearances, we shall soon have a circulation, to say the least, as large as any other agricultural paper in the United States. We feel extremely flattered by this preference on the part of the public, and our subscribers may be assured that each succeeding number of this paper will appear with embellishments and matter fully equal, and in some instances superior to the first, and we trust that all will continue to exert themselves in extending our subscription list.

ERRATA.—Page 10 of April No., read 22 for "2;" p. 11, Thomas Addis Emmet for "Robert Emmet;" p. 15, cash for "each," permits for "prevents;" p. 16, burn for "trim."

ORIGINAL CORRESPONDENCE.

We thought at first on reading over the following article, that we would divide it into two numbers, but the subject is so important a one, and it is so clearly and ably treated by the writer, that we have concluded to give it entire at once. Manure on Long Island, and in fact in all this neighborhood, costs the farmers, on an average of \$15 to \$20 per acre, when not produced on the land where wanted, and on gardens and nurseries it frequently costs \$100 an acre; it will be seen, therefore, that it is a very important subject of consideration to all who wish to increase the fertility of their soil. The quotation from Mr. Clark shows, that when land is not too dear, it is much the cheapest method to grow the manures necessary for its fertilization immediately upon it; yet at the same time, everything within reach, at a reasonable cost of money or labor, ought to be carefully gathered up and applied.

For the American Agriculturist.

WHAT ARE THE MOST ECONOMICAL MANURES?

It is obviously *the first duty* of the agriculturist to bring his land into the highest condition for cultivation. It costs no more to plough, to harrow, to sow or plant, to hoe or cultivate, an acre that will produce thirty to fifty bushels of wheat or rye, sixty to a hundred of corn, five hundred to six hundred of potatoes, or a thousand of beets, turneps, or other roots, than to perform the same operations on land that will yield but one third as much. It is sufficiently manifest, then, without the trouble of stating the proof on which it rests, that of two persons who are carrying on the operations of farming under nearly the same advantages of markets, cost of labor, and original price of land, the one who gets the large crops, if they are obtained without too great an outlay for manures, can be making a fortune, while the other is losing one. The great importance of this subject, and the numerous circumstances which suggest variations in the system of enriching land, to adapt it to the location, means, facilities, &c., is a sufficient reason for calling the attention to it frequently.

The *system of fallowing*, which has the sanction of all past ages, and, till within a few years, the approbation of some of the leading agriculturists of modern times, seems now, by common consent, to be utterly exploded by all intelligent minds. I shall content myself by stating a single objection, as it is more than equivalent to all its advantages, even if five times as great as claimed; and this is the loss of the crops that might have been raised on it while lying idle. The object of fallowing is variously stated by its advocates, but, after the extermination of weeds and obnoxious grasses, they all resolve themselves into one. "Rest, renovation, *tired of crops*," and all the other phrases applied to soil, in rational language, imply simply, that there are certain constituent principles in soils

which are absolutely, and invariably essential to the production of any given crop; and that one or more of these principles, in such condition as to be available to the growing crop, have become exhausted, or exist in such limited quantity, as to yield the farmer but a small return for his seeds and attention.

Soils have no whims or caprice to gratify; no favors or aversions to consult, but are, everywhere and under all circumstances, governed by fixed, uniform, and *rational* laws; and, under precisely the same circumstances of climate, season, moisture, and freedom from enemies and disease, if they contain the same elements and in the same proportions, they will with the same seeds and treatment, produce exactly alike. When we find, therefore, that land, which has once borne good crops, has subsequently failed in producing them, if all the other circumstances are similar, *we know* that some of the elements essential to vegetation have been exhausted to such extent as to require renewal. By adding manures of the right kind, we give to the soil the principle in which it was deficient, and which makes it once more to return its grateful crops to the husbandman. If denied it from this source, like a faithful servant, it will task all its powers, for a renewal of its wasted energies; but this it can only do in a state of rest. In this condition, acted on by the atmosphere and the moisture derived from it, in the various forms of dew, and rain, and snow; under the modifying and energetic influences of frost and heat, light and electricity—the last, though unseen and but little heeded, being undoubtedly *the great element* of change; such modifications of the original principles of soils take place, such new developments and combinations from the alumina, silex, lime, soda, sulphur, potash, phosphorus, and all the other ingredients composing it, together with such additions from the atmosphere, as enable it soon to renew again its accustomed burdens.

Now all these various objects can be accomplished, and much more rapidly, while clothed with vegetation, as this is an additional element of strength and effectiveness superadded to all the other agents. The whole expanded surface of the growing plants, through every one of their myriads of absorbent vessels, invisible to the most powerful microscope, is drawing in nutriment from the surrounding air—carbon, oxygen, and hydrogen, and we know not how much more besides; and condensing it into a solid and useful substance; while its roots aid by acting on the constituents of the soil with all the energy of vitality, to which even galvanic or electric force, or the intensity of a furnace heat, is but the infant's compared with a giant's mighty grasp, in detaching the intimate, and otherwise almost inseparable earthy compounds. *To give up vegetation as an agent for the renewal of fertility, is to relinquish the most powerful aid that can be found either in nature or art.* The difficulty is not that it is insufficient for the object required, but when matured, the temptation to rob the soil of its just dues, is too great to be successfully resisted by the shortsighted cupidity of its owners. They kill the goose that lays the golden eggs; or, like the greedy dog,

they lose the prize they are sure of by diving after the shadow. Give but a portion of its own production back to the soil, and it will continue to yield, while the earth shall last, to the fullest measure of its capacity.

What vegetable productions, then, are best adapted to fertilizing the soil? Universal practice gives the preference to clover, at the north; and the most respectable testimony assigns to the cow-pea the preference for the south. They are each admirably adapted to this purpose. They are easily cultivated, by sowing broad-cast, harrowing, and rolling, and they require no subsequent attention. They are a sure crop on nearly all soils in good condition. They are easily turned under the surface, or, if required in part for the support of animal life, they are favorites, either green or dry, for nearly every quadruped of the farm. For a large portion of the lands in this country this is the only system that can be resorted to, with any hope of sustaining or augmenting their fertility. It is unquestionably true, that if all the refuse vegetation raised on the farm, stubble, bad hay, straw, leaves, &c., together with the excrements and remains of animals, which are simply the ultimate products of vegetation, could be added to the land, which should, at the same time, be protected from exhaustion, by washing or otherwise, it would be in a continual state of improvement; but as all these are unavoidably subject to great waste, and we are constantly taking off what, by no possibility of means, can be again added to the land in an undiminished state, we must look to other sources of compensation, if we would maintain the just balance of things.

Besides abundant and unquestionable proof, furnished by accurate experiments, which have shown the large proportion of material existing in every vegetable, which has been drawn exclusively from the atmosphere, experience, for a series of years, has shown, almost as conclusively, that by adding an occasional crop to the soil, its fertility is fully maintained, without the addition of any other substances, excepting in the most limited quantities. A rotation, for instance, in which a second, third, or fourth crop added to the soil, with scarcely an appreciable addition of gypsum, has been found to improve poor lands, and fully maintain good; enabling them to part with all the intervening crops without deterioration. It is as clear as light itself, however, such a practice must have a limit; that wheat, or any other crop containing principles not afforded by clover, can not be taken off the ground for an indefinite time, without returning to the soil where grown those identical principles, in some shape. Some soils will sustain this system longer, others shorter; ten, fifty, or it may be a hundred years—but it has a limit beyond which it will not go. Wheat has been found a prolific and profitable crop in every section of the United States, when the land was first subjected to cultivation; but in the older portions of them some essential ingredient has been exhausted, and the most careful manuring and husbandry have been found requisite to ensure a crop. At one time New England produced large quantities, and, as brought into successive cultiva-

tion, the region bordering the Hudson, the valley of the Mohawk, western New York, and now Ohio, the prairies, and the illimitable region beyond.

In adopting the above system, it is always advisable, whenever it can be economically done, that some of the salts, as they are chemically termed, such as plaster, lime, potash, or ashes, salt, &c., should be applied to the growing crop, as they sometimes add a principle in which the soil is deficient, by which it is enabled to supply vegetation till exhausted of some of the other materials. Gypsum, when found to be especially beneficial, ought to be liberally applied; and on clover, for which it is a food, and over nearly all the States remote from the seacoast, and in some instances near it, it is proved to contribute greatly to the growth of the crop, and frequently returns in the augmented product, 5, 10, and even 20 times its cost. Lime, also, is of great benefit on every soil not already charged with it; and salt in small quantities is valuable in addition to its efficiency in destroying grubs, worms, and insects. The above applications, with many others, are frequently said to act as a *stimulus* to vegetation; a somewhat indefinite phrase, as we conceive it has a very different method of acting from the ropesend, applied externally, or the whiskey internally, as an excitant to a sailor's strength. Gypsum furnishes food to many growing plants,—so does potash, salt, lime, soda, &c.; but they also help to decompose and liberate other principles held in excess in the soil, by which an equilibrium is restored, and vegetation has again a full supply of all its requisite materials. A slight addition to the foregoing may do much to prolong and even augment the fertility of soils which are dependent on crops alone for support.

There are, however, large sections of our country in the neighborhood of good markets, furnished by our larger cities and manufacturing towns, where the crops are too valuable to be thus applied; or rather, the object can be effected with other materials at a cheaper rate. Here large amounts of excrementitious matters are collected, rich in every principle of fertility, and if properly husbanded, they can be supplied in quantities sufficiently abundant, to sustain a broad margin of circumference in the highest condition. Your worthy correspondent, Mr. Partridge, is showing to the neighboring farmers what will prove more valuable to them than the mines of Potosi; and he is an explorer on those subjects, in whom full confidence may be placed; for, in addition to his qualifications as a practical farmer, most of the materials he describes have been the subject of repeated and strict analysis. Wherever any of these materials are furnished, as they frequently are through the country, by the manufacturers of any of the animal products, as wool, bones, horns, hair, hides, glue, or potash, glass, or some of the chemicals, they should always be carefully saved, and mixed with other ingredients for the benefit of the soil. Fish and sea-weed abound along our Atlantic coast, and whenever available, they should be skilfully compounded and applied to the contiguous land.

There is one source of fertility, so abundantly scattered over the northern and eastern portion of the country, that it can not be too often and too strongly brought to the notice of the farmer. It is the vast accumulations of *peat*, collected in nearly every swamp and muck hole, and abounding on almost every farm of hill and dale, east of the Alleghanies. We have more than once before alluded to this, and it is unnecessary that I should now do more than call attention to it. When thrown out of its native bed and drained, and mixed with half its quantity of green stable-manure, it is ascertained to be fully equivalent to the latter unmixed. A dead horse has been found capable of converting 20 loads of it into a first quality of manure; and any animal substance compounded with it is absorbed, and all its nutritious gases retained, till they are yielded to the demands of vital vegetable affinities.

Ashes, containing all the fixed and inorganic substances of plants, are every way adapted to furnish these same materials to plants again. Whenever obtainable whether leached or unleached, they should be applied, unless the soil is already preoccupied, in which case, as in the application of all similar salts in excess, they are for the time being, useless, and in some instances, positively injurious.

For that portion of the farm contiguous to the stables and cattle-yards, however, nothing is better adapted to sustain fertility with every form of cultivation, than the animal and vegetable manures there found. The bottom of the yard, which should possess the concave form like a dish, so as to save all the drainings, ought to be covered to the depth of 2 feet with vegetable matter of some kind if possible, such as peat, dry tanner's bark, straw, hay, weeds, corn-stalks, or anything of this nature, and if these are unattainable, the richest turf that can be procured may be substituted. All the evacuations from the animals, should be dropped on this, or immediately added to it, before draining or evaporation can take place, so that all the liquid and gaseous portions may be absorbed. By allowing these to escape, a large portion of the manure is wasted. The manure may be doubled or trebled by augmenting the materials to receive and retain it, and so much of the yard as can be sheltered should be guarded from rain and excessive heat, to prevent the washing of the soluble portions and the escape of the gases. Fermentation should be allowed to take place, only when covered with earth or peat, or such substances as will at once seize upon and retain the ammonia, which is always set free to a greater or less extent, whenever fermentation takes place. We prefer this operation should go forward, while surrounded by furrows, and surmounted by a growing crop, so that the rootlets of the plants, while immersed in this steam-bath, can drink in at every spongiole, the nutritious vapor as it is generated. The record of crops, thus grown, show conclusively the advantage they enjoy from the proximity. We believe that vast improvements are yet to be made in securing the aerial portions of manure, which escape all the precautions for detention, hitherto practised by the most careful. Lime scattered

around the premises, will do this to a certain extent; charcoal, gypsum, particularly when dry or burnt, are both powerful condensers of ammonia, the fertilizing principle that escapes. Chloride of lime, if it can be made sufficiently cheap, we think will be a powerful and perhaps entirely efficient absorbent. All of these, when saturated, may be spread upon and mixed with the soil, when they will yield their concentrated nutrition to vegetation. But I am inadvertently going over much more ground than I anticipated when commencing this article, and must bring it to a close, by quoting the relative cost of the three most general systems of fertilizers as estimated by Hon. William Clark, of Northampton, Mass.; premising, that the land here subjected to cultivation, was worn out pine plains, which had been bought within two miles of the village, at the price reckoned. I believe that an increase in the intrinsic value of the land would make much more difference in favor of *growing* manure, as one season could furnish a crop twice or three times as great as would be produced on the cheap land in two years.

Cost of raising manure by the growth of clover and grass 2 years on land worth \$10 per acre.

Two years' interest on land	-	-	-	\$1.20
8 pounds clover seed, 80 cts. ; 8 pounds red top,				
25 cts. ; 4 quarts timothy, 33 cts.	-	-	-	1.38
$\frac{1}{2}$ bushel plaster and sowing and rolling for 2				
years	-	-	-	1.10
Total	-	-	-	3.68

Cost of manuring an acre, with an amount of fertilizing material equivalent to the foregoing, furnished by 2 parts of peat, and one part green stable manure, allowing as the cost of the peat, 25 cts. per ton for digging, and \$1 a cord for the stable-manure, and cost of hauling and spreading	-	-	-	7.48
Cost of manure equal to the above, one acre with stable-manure, at one dollar a cord, and carting and spreading	-	-	-	12.14

By the above calculation, made by a shrewd and accurate observer, in whose opinions I place great confidence, we have lands manured by the crop, at less than one half the price of the peat, and nearly one third that of stable manure. A large item of costs in the foregoing is the labor, the cost of hauling and spreading of which is entirely saved in the first process, it being produced just where it is wanted. It may be observed as a partial correction to the above, that the peat is applied to a great disadvantage. If it were compounded with the carcasses of dead animals, which would otherwise be wasted, or if it could be made to receive the wash or drippings from the stables and yards, or in some instances, where the land has sufficient digestive power, as is the case with the porous, dry, greedy, silicious soils, if it be applied in its raw condition, the costs may be reduced, when not too remote, to even below that of the exclusively vegetable manure. I may add, also, when the land undergoes a rotation once in two or three years, the seed charged above may be omitted in the account, as enough will be found in the ground to furnish an abundant supply. We conceive it increases the profits of the above system, to allow cattle, and

especially sheep, to consume a part of the vegetation, as the benefits to the ground is scarcely diminished, if consumed in the field, and sheep have a cleansing effect, by eating nearly every particle of weeds and obnoxious plants.

R. L. ALLEN.

Buffalo, March, 1843.

For the American Agriculturist.

Near Lockport, Illinois, Feby. 17th, 1843.

SIR: Having occasionally seen your agricultural paper in this state, and noticed your invitation to correspondents, I am induced to say a few words to you on affairs in this quarter of the Union. The country around us is mostly rolling prairie, and furnishes, I believe, as fine a natural soil as the sun ever shone on. It is highly productive, and matures almost every kind of crop which is cultivated. It is also admirably adapted for cattle, horses, sheep, and swine; and I am satisfied we can raise them as cheap as can be done in any part of the world, *where labor is fairly paid*; for they are subject to few diseases, food is furnished in great abundance at the cheapest rates, and the climate is not severe.

Everything seems to be favorable to our prosperity, so far as nature is concerned, but the miserable condition of the currency, and the debts of our state seem to blight our best prospects. Could we enjoy a stable, wise system of things in the state and general government, we should reap a fair return for our labor. We are trying to do something by way of getting out of our difficulties, by turning over our canal, and the lands appropriated to it for the purpose of completing it in such way as that it can be made available. If we succeed in this, we shall have brighter prospects so far as the canal route is concerned, and we hope for such a gradual amelioration of things, as will soon afford us a sufficient currency, and a sound state of trade.

But to the subject of agriculture. We are endeavoring to procure good breeds of animals, and wish all the information on the subject we can get from every source. Some of our enterprising farmers have procured valuable ones, among whom I may mention our public-spirited commissioner, Wm. Gooding, Esq., who brought a number of choice Berkshires from Buffalo; and Mr. James Murray, whose sheep management you described in your September paper, and who, in addition to his fine flock of Cheviots, brought on two very valuable Paular Merino bucks last fall, for the purpose of improving the quality of their wool. Such spirited movements, generally followed up through the state, would soon give us as productive an agricultural district as the United States afford.

There is a great deficiency in our farmers not taking more agricultural papers. Could every one be induced to do this, we should soon have a great advancement in everything pertaining to our interest. We should then be advised of the improvements going forward in the world, and know what to adopt, and what to reject; and it is probable every man who owned a quarter section of land,

would be benefited to ten, perhaps fifty times the amount of his subscription. There is no excuse for this indifference to their best interest, but the excessive scarcity of money, and this rather aggravates than excuses the neglect, as every farmer would by this means *get money*, instead of spending it. I am very respectfully yours,

T. L. C.

A. B. ALLEN, Esq., New York.

For the American Agriculturist.

AGRICULTURAL SCHOOLS.

A. B. ALLEN, Esq.—SIR: What has become of our agricultural schools and colleges? I suppose you will answer we have never had any. Well then, what has become of the many suggestions and plans which have appeared in our agricultural papers, able and well-written articles, setting forth the importance of such institutions in these United States? Were the writers all visionary men—having been humbugged themselves, and then in their turn, humbugging others? Or is it a sober truth, that the sons of the farmers should be educated to their profession, as well as other young men to theirs?

We may talk and write upon the science of chemistry, analyzing soils, rotation of crops, plowing in all sorts of vegetation for manure, use of lime, ashes, salt, charcoal, and various other fertilizers, all of which is well in its place, and does a vast deal toward leading the mind to investigate for itself. Yet, after all, the reason of the why and wherefore of the action of these things lies far beyond the reach of the mass of the farming community; whereas, were there but a single individual in each county in the State of New York, thoroughly educated, with a paid salary to go about among the farmers, lecturing and instructing them, it would prove like leaven, leavening the whole lump. If we are not to have the Smithsonian bequest, to do something with on a respectable and national scale, let an individual state establish a small school. This may be done at a profit on the outlay, for while the cattle are breeding, the stock growing, the crops vegetating and maturing, the experiments are being carried on in all these operations, as well as the more minute, under cover, in rainy or stormy days, as well as evenings. Are there no men of fortune and leisure to be found, who are willing to take hold of this thing?

S.

New York, April 6th, 1843.

Our correspondent, it will be seen, is rather severe upon the peacock, and per contra, we will say, that when well fattened, and not over a year old, we have found them delicious food. Peahens were considered a great luxury on the tables of the Romans.

For the American Agriculturist.

THE PEACOCK.

The most showy and magnificent bird of the farm-yard is the Peacock—but it is a bird for orna-

ment solely. Of use they are none. They are found in all latitudes of the United States, and in the pleasure-ground, on a portico, a balustrade, or the house-top, a favorite perch by the way, for this wayward and capricious creature. No object can be more beautiful. I need not describe the brilliancy of its plumage, the color of its various dyes, nor the exceeding elegance of its form. These are familiar to all our readers.

Idle and vagrant in its habits, mischievous in its propensities, and of little utility either in its carcase or its eggs, it is tolerant alone for its gorgeous display of plumage, and the showy splendor of its attitudes. I have kept them many years, and every year of my observation only confirms in my mind the truth of the ancient proverb applied to the Peacock. "It has the plumage of an angel, the voice of a devil, and maw of a thief." They are destructive in the garden, vindictive and quarrelsome among other poultry, without either the merit of bravery, or the energy of defence. Yet after all, I like them, they make such a beautiful show among the poultry, and add to the infinite and delightful variety of animated creatures, with which a kind Providence has blessed our vision.

L. F. ALLEN.

For the American Agriculturist.

FARM-DOGS.

This may be deemed by many, a small subject; but I apprehend in a great many cases, it is in practice, found large enough to produce infinite mischief and inconvenience. The American people are probably more miscellaneous in the choice of their dogs than any other, and nothing is more common than to find attached to a farm-house, and to pretty much every other house too for that matter, in this country, an overgrown and ungainly Bose, Lion, Watch, or Tiger, and in more than half the cases, not worth in his whole life the food he eats in a week. In a "democratic" country like ours, it may be thought impertinent to criticise the public taste in the question of a dog; but nevertheless, as they are usually considered, and in frequent instances really are, an indispensable adjunct of one's establishment, it may not be amiss to ascertain what in truth is the best species of animal for the farm. Do not imagine that I am a dog-hater, and that these interesting, as well as useful creatures attract none of my esteem. The first live thing that I ever owned in early boyhood was a puppy, and a faithful and favorite dog has been among my companions more or less ever since.

But I am by no means an indiscriminate admirer of the race. An uncouth brute without breeding I detest. No one better likes a true bred, sagacious animal than myself. For guarding purposes large dogs are required, and none, perhaps, will better answer than the Newfoundland, which unites the



THE PEACOCK.—(FIG. 10.)

generosity, ingenuity, and intelligence of the race more than almost any other; while the Hound, Setter, Pointer, and the numerous kinds of Spaniels, furnish to the sportsman all the requisites for his varied pursuit. The Bull-dog and Mastiff I have little affection for. Their savage, cruel, and ferocious disposition need only be called in requisition when the midnight robber or the determined burglar are to be repelled, and for common farm uses are little to be desired. The common cur of the country, running through all sizes and gradations, and into the limits of almost every other breed, is, on the whole, a pretty good animal, and answers a tolerable purpose; but the very best farm-dog I have yet seen, is the Terrier. These are of great variety, but the size I prefer is not larger than a fox; and in sagacity and fidelity, they are equal to any except the Newfoundland, and in courage *they have no equal*. To all vermin they have a natural, and most destructive hatred; nothing escapes their vigilance. They see at night nearly as well as the owl, and their watchfulness and wonderful activity are perpetually on the alert. No buildings need be infested with rats if they can get under them, nor the fields with mice, weazels, polecats, minks, or other noxious animals, if two or three of these useful creatures be near; for if kept in pairs, or more, they will hunt for days together, away by themselves, and destroy thousands of mischievous depredators. For squirrel and raccoon hunting, and duck-shooting, the rough-haired Scotch terrier is equal to any other; and in a chase, within sight of the game few dogs are their equal.

I now own a terrier that I have had for five years past, raised him from a puppy, not cropped either in the ears or tail, for this I detest, and it greatly retards their activity for a farm-dog, and I have never yet seen his equal. In his labors of watchfulness, he is now attended by two of his sons of the same stock, and all vermin and mischievous animals are effectually kept at a distance. Hundreds of racoons, foxes, and minks, have they destroyed, besides whole hecatombs of field mice, rats, and squirrels. They eat little, are out of the way, light, agile, and altogether are the best dogs I know. They are to be found in almost every village and principal town in the country; but care should be taken to get those of true breed, or as near to it as may be. There are many varieties, but the rough-haired, medium sized are the kind I prefer. Those who are curious and particular in their dogs, need but to try the Terrier, to be convinced of their value. My old dog, Peterkin, has caught many a wounded duck in the broad river in fair diving, and swimming with heavy ice running in the current, he has nosed out and killed several minks under water, has swam across the Niagara where it is half a mile wide, with a strong current, time and again, and was never whipped by another dog in his life.

L. F. ALLEN.

For the American Agriculturist.

SOUTHERN PLOWS AND FLOWING.

MR. A. B. ALLEN: As good plowing is the foundation of good husbandry, and as it is necessary to have good plows to be enabled to do good plowing, I propose to describe a few of those that I have met with in North Carolina, South Carolina, and Georgia, that you may see how they will compare with northern plows, and whether they are the best that could be adopted for southern culture. The first is the shovel-plow. I refer you to the pencil sketch for a view. The figure at A gives

(FIG. 11.)



you the plow entire, ready for use; B gives a front view of the iron that occupies the place of a mold-board in the northern plow. It is made out of wrought-iron, in the shape of the blade of an Irish shovel, with a loop on the back side for the stock to enter. They are generally made by the blacksmith on the plantation where they are used. The operation is to draw them through the ground with one horse or mule, the plowman holding them in an upright position, throwing the dirt both ways, mostly to the right hand, or furrow-side of the work. It is pretty much like dragging a cat by the tail. Then comes the bull-tongue, made much like the shovel-plow, except the iron part, which is narrower and thicker. I have seen them from 4 to 6 inches wide in the widest place, and 1 to

1 1-2 inches thick, tapering to a point both ways, looped on the backside to fasten it to the stock as above. It takes its name from its resemblance to the tongue of the animal. To plow with it, is a cat-pulling operation.

The next that I will notice, and perhaps the best in use of those manufactured on the plantation, is the "Allen plow." This is a wrought-iron plow, with mold-board, land-side, and standard and point, all connected, and forming but one piece. The mold-board forms an angle of about 40 degrees, with a line of the beam, and, in operation, will throw the dirt from one to three feet, according to the speed of the team. In figure 12 you have a

(FIG. 12.)



sketch of one as it stands ready for use. The land-side is a bar of iron, about 1 to 1 1-2 inches wide, and from 1-2 to 3-4 of an inch thick; standard, about 1-2 inch by 1 1-4 inches. The mold-board is a piece about 1-4 inch in thickness, welded on to the standard, without braces, or any other support. They are from 6 to 10 inches wide, furrow-wise, and are used with one or two horses or mules, as the stiffness of the soil may require—usually with one mule on sandy lands. It costs from three to five dollars, and will last one season. This plow, on a sandy soil that is perfectly clean and free from weeds or grass roots, does very well, where it is desirable to throw and scatter the ground or furrow; but in a sandy or loamy soil that has a coat of vegetable matter to turn under, of either grass or weeds, or for plowing in manure, it would be useless for a person who desired the work well done. The dagon plow is the same as the Dutch bull-plow of the north, with wooden mold-board, and wrought-iron share. I have seen but a few of them in use. The Scooter plow, I believe, is of the bull-tongue variety.

Of the cast-iron plows, I find more of Freeborn's in use than any other kind; and although they are inferior in form to all of the improved northern plows, they do fair work on the naked sandy lands of the south. They are made in a cheap, rough manner, and sold at a low price, which is the best recommendation they could have.

I have met with very few of the improved northern plows. Those that I have seen are Ruggles, Nourse, & Mason's, of Worcester; and D. Prouty & Co.'s, Boston. They are denominated here the turning plow, and have earned the same high reputation that they have at home; but they are by no means in general use. They are, in fact, scarcely known. They are only now and then to be found in the hands of a planter of enterprise, who has made up his mind to break through popular prejudices, discard the exhausting system, and bring science in aid of labor, in his agricultural pursuits.

Barnaby & Mooers's plow is unknown here, except to such as have been in the habit of reading

the agricultural papers, and seen the accounts of the premiums that it has won at the various plowing-matches at the north. I have been exhibiting some of them in this city the past week. They are regarded as an ingenious and useful improvement, but are said to be too heavy (No. 4) for the lands here. They do not reflect that the resistance that a plow offers, in being moved through the ground, is more the result of shape than weight. I have no doubt that it will be found, on trial, that Barnaby & Mooers's No. 4, weighing about 120 lbs. in full rig, will require less power of team to turn a given amount of earth than the Allen plow will; that only weighs about 40 or 50 lbs. If I can get a trial of plows here, as I anticipate, I will give you the result.

The cultivator is very little in use here. It don't seem to be a favorite at all, although, properly made, it would be a better implement than any now used in the cultivation of corn and cotton, except the sweep, which does its work very much as a good cultivator should, and is a useful instrument.

If, during my stay at the south, I discover anything that will aid the cause of agriculture, or be interesting to your readers, you may hear from me again.

E. CORNELL.

Augusta, Georgia, March 16, 1843.

In answer to Mr. Hendrickson's inquiries as to the manner of obtaining the large crops, for which premiums were awarded at the late meeting of the New York State Agricultural Society, we do not find anything very peculiar in the cultivation. Where the land was not naturally rich, it was made so by a plentiful use of barnyard manure, and some ashes and plaster. Mr. Phelps planted his corn in hills two feet apart each way; kept it clear of all weeds, and obtained a product of 122 bushels to the acre. Of oats, he sowed five bushels to the acre, on well-manured land, and obtained 102 bushels. In the same field, side by side, without manure, he got less than 86 bushels on an acre and a half; thus demonstrating, even on naturally rich land, the benefit of adding fertilizing substances to it. The same care was used in the cultivation of all the other grain, and also of the root crops, and the products were uncommonly large.

For the American Agriculturist.

CULTIVATION OF CORN IN OHIO.

Middletown, O., March 1, 1843.

MR. A. B. ALLEN, Dear Sir: In looking over the February No. of your paper, I noticed in the report of your State Agricultural Society, an account of some extraordinary crops of grain, which puts the blush upon our Buckeye twenty-foot cornstalks; yet I do not doubt the truth of the statements.

My object in addressing you is to learn by what process such splendid results have been attained; the kind of seed, and the time of sowing; the method of preparation, and the kind of soil. Was

the barley the spring or fall variety, and how much seed was sown per acre? Oats—the time of sowing, the kind of seed, and how much per acre?

As you did me the honor to mention my corn crop in your paper, contrary to anticipation, your notice has brought me a liberal amount of orders for seed; and I feel under obligation to give some explanation of the process by which I obtained it. When the common method of selling corn was by measure, some six years since, I planted exclusively the large gourd-seed variety, which had a large ear, small cob, and deep grain. It was rough upon the outer ends, and would weigh from 52 to 54 lbs. per bushel.

The system of selling corn by weight being established, at 58 lbs. to the bushel, induced me to undertake some method of increasing weight as well as quantity. I therefore selected, to mix with my gourd seed—first, a kind with large ears, large cob, and shallow, flinty grain; second, what is termed the flesh-colored variety; third, the real flint, weighing 63 lbs. to the bushel; fourth, the large Virginia yellow. These mixtures were entirely different kinds of corn, and raised in different sections of the country. They were well mixed, and my first crop presented rather a motley appearance; the second was uniform. Finally came the *miqua* variety which I now cultivate, with small red cob, and large ears. It is now a reddish color, weighing 60 to 61 lbs. per bushel, and yields from 80 to 100 bushels per acre, according to soil and cultivation.

My method of selecting my seed is as follows: During the gathering of the crop, I have attached to the tail end of my wagon a large basket, into which is deposited the choice of all the ears. My method is to save for seed all the ears where there is more than one on a stock, as it does add to the yield.

My method of cultivation is, to plow my ground as deep as two big horses can tug, with a No. 7 plow, commencing the work the latter part of March. I plant without harrowing, as the ground is more liable to bake and become hard if harrowed, in consequence of heavy spring rains. I usually commence planting about the 15th of April, by furrowing out the land the first way with a large plow, four or five inches deep, and then cross-furrow it with a smaller plow, and not so deep, which gives a quantity of mellow earth for the corn to be covered in. It is furrowed in squares, from 4 feet to 4 feet 4 inches, according to the quality of the soil. I drop in each hill from five to seven grains, and as soon as it is up two or three inches, pass through twice in a row with the cultivator, in the direction in which it was last furrowed; and, in about a week, pass twice through in the contrary direction. And now comes the time for thinning out. This is done by reducing the stalks in each hill to three or four; and I then commence plowing. If the corn be sufficiently large to prevent its being covered by the dirt in plowing, I throw the furrow toward the corn; if not, from it. I generally plow my corn three or four times, and by all means avoid working the ground when wet, as it not only injures the soil, but the crop.

The Kenilworth pigs you imported for me are coming out beyond all expectation; and when I shall have had time to make a cross with them and Windsor Castle, and some of our great Miamies, I can produce something that will astonish the natives of the empire State quite as much as we of the Miami valley have been stirred up with Mr. Phelps's 102 bushels of oats per acre.

Yours, &c.,

R. H. HENDRICKSON.

For the American Agriculturist.

CULTIVATION OF COTTON.—No. 1.

Log Hall, Miss., March 9, 1843.

A. B. ALLEN, Esq.—SIR: I propose giving you a series of articles on the cultivation of cotton, going over the whole matter, from plowing to sowing, picking and baling. I assure you, I undertake the matter with a degree of reluctance, not usual to me in such matters. This reluctance must not be attributable to any want of desire, but more from the fear, that I can not make the matter of that interest that is expected of me. I can say, there is a satisfaction in giving my aid to you in your exertions, as also in having a fair chance to talk to my brother chip, Dr. Cloud.

In the first place I assure Dr. C., and all others whom it may concern, that I do practise to the letter the plan I point out, and that there are many others who pursue the same, in all its minutiae; we may not cultivate every year each field of cotton precisely alike, nor do I think it is desirable that the science of farming should ever be reduced to a mere trade, as cutting braces, or making sash. Individuals following farming, may have a general outline of proceeding usually pursued, but subject to variations according to the season, time of planting, and ordinary health or casualties. As an instance; last season I had cleaned over the first time, nearly 40 acres of cotton, and after commencing another field, I thought it best to return to this with plows and hoes, to give earth to the plant; a few days of quite cold weather having threatened, as I feared, the life of the cotton. Had I continued in the routine of putting in order in rotation, I think I might have lost that portion of my crop; whereas, the light earth protected it, and such changes must continually occur.

Forced from want of patients to quit the "pill tile," and give up the "spatula," I necessarily sought the field, and having given it my entire attention, it appears to me that the mode I pursue is so much a matter of course, that I see nothing either bordering on a "degree of perfection" or worthy of applause; and from this feeling I am induced to think, that my brother chip has an overseer, and enjoys "otium cum dignitate," or as we farmers say, "lives easy." Unless I could give as much interest as others have by a "first trip to mill," or one's "first dinner in New Orleans," I can not see that a mere talk of one's course merits much thanks.

In remarking upon the "dilapidated appearance which almost every cotton plantation, of but a half dozen years' standing, presents to the eye, sickening under this blighting influence," (see Dr. C's. article, last paragraph page 192, Vol. III. Cultiva-

tor), alluding to "the system of culture" and "meager accruing profits," &c.; I think he is rather severe. It is certainly late for the discovery to be made, that the system contains within itself, "the elements of certain destruction," and strange that the poor patient has survived 50 years with this disease within its bosom. So far from this being the case, as far as my experience goes, we now make a larger per hand crop than formerly. I well remember hearing of a crop of 8 bales per hand, much bragged of in 1831, through this whole region; whereas, this has since been equalled with an abundance of corn and pork, and no talk of it at that. The language of Dr. Cloud when on this branch of his subject, sounds rather like that great, little dandy, Dickens, in his "Notes," &c.; and if your readers will refer back to the time, when farmers were careless in your region of our country, they will find that other cause exists for it than cotton.

I think the mode of cultivation can be improved, and I think Dr. C. has touched the right key, but I think also, that there is more fault in the desire of making large crops, than in the system of farming, unless he considers it a part of the system; and if he does, he only adds fuel to the fire; that is now (according to his opinion) wasting his patient away. The fond hope of making 5,989 pounds of seed cotton, would run us all mad—we would not take time to cook—Sunday would be in name, and our nights would be turned to day, if burning cane in the cotton-fields, could make light enough by which to work. Our peculiar crop requires the whole year to get it available, if a large crop. One of my neighbors is now really absent, selling his last crop, while his hands are planting this crop (not cotton, but corn, &c.); we therefore have not the leisure to improve. Yet even with all this, I have seen gulleys, dilapidated fences, and scratching the surface; in short, bad farming elsewhere, than in the cotton region; and I believe the same cause exists, viz., either indolence, or too great anxiety to accumulate property, instead of taking proper care of that already secured. I may be expected to give my prescription, differing as I do from Dr. C., as to the best mode of eradicating the evil; for I acknowledge there is an evil, but think it inherent in man, not in the cotton-planter, nor in working 8 to 10 acres of cotton per hand, instead of 4 or 5. The evil is, or rather the evils are, *planting* for too large a crop, not *cultivating*; and throwing away the farmer's best jewel—his manure. If I am right in pointing out the disease, the remedy is at once apparent; cultivate for a less crop, cultivate well; save all manure, and add to it, as a part of the regular business of every farm. Which farmer gets on best—the one who clears a very small amount, yet in a series of years is possessed of as much effective force as him who makes the greatest possible exertion, and wears out his land, and diminishes his force?

I would rather induce our brethren, by persuasion, to keep all things about them in good order, than to cast them off, as entirely lost. The times are as bad on the grain-grower and pork-producer, as on us; their profits must be "meager" indeed, and we should, in looking around, reflect on 38

cents for wheat, 3 cents for bacon, 16 cents for corn, and the latter two brought from several hundred miles. Can we complain at 5 cents for cotton? should we despair? We are making abundance of the necessities of life, and if our farmers will but give up the idea of amassing fortunes for their children, and learn them to work, instead of reading Blackstone, or feeling pulses with kid gloves on, I doubt not, in a very few years, even with this same mode of culture, we will see grass-plots, flowers and shrubbery; hear the sweet music of the spinning-wheel, lowing of herds, tinkling of bells, and taste of the delights of social life.

I am done with my preface now, and assure you, I have no unkind feeling, being only desirous to defend my calling, and as no one seemed willing to do so, I have ventured thus far. I am, yours, &c.,
M. W. PHILIPS.

REMEDY FOR HARD TIMES.

We have been asked repeatedly to give our views at length, upon the present state of the country, but we have thought proper, thus far to forbear. We fear that we might be accused of a political bias, foreign to the object of this paper. Still we think it legitimately within the scope of an agricultural journal, to give such views from time to time of the state of the nation as will tend especially to promote the interests of the farmers, and if we could depend upon our readers looking upon these subjects in the broad national view in which it should be our aim to place them, we should henceforward feel less hesitation in entering upon their discussion.

From a letter recently received from Thomas B. Stevenson, Esq., late editor of the Kentucky Farmer, and now of the Commonwealth, we quote a paragraph. Here is the best remedy for hard times that we know of, and if all states will go and do likewise, there will soon be an end of them.

"The people of Kentucky are righting up in pecuniary matters rapidly. The crisis is past. We are buying nothing and selling a good deal, though at low rates. Exchange on the east is in our favor. Not only have we stopped buying foreign goods, but our people are returning to the old time-honored practice of manufacturing domestics by household industry. The wheel has lain idle for some years, but it is buzzing away now. Hemp, flax, linens, jeans, linseys, woollens, &c., the product of family looms, are substituted for foreign goods."

As the following communication comes from one of much personal experience in sheep-breeding, after due consideration, the subject seems so important, we have concluded to admit the article into our columns. Our correspondent will perceive now, that two numbers of the promised essays on fine-woolled "Sheep Husbandry" have already appeared. Ill health of the intended writer has prevented the promised series on middle-woolled flocks. We hope, however, to be favored with them soon.

SHEEP, PAULAR MERINOS.

TO THE EDITOR OF THE AMERICAN AGRICULTURIST—SIR: I am a reader of your paper, and always much interested by what you have to say about farm stock, more especially sheep, with which I have been conversant to a greater or less extent for a long time, commencing about thirty years since, when I first became a sheep owner.

It is an admitted fact, that the fine-woolled flocks of the United States are sadly deteriorated, indeed, nearly "run out," so much so as to be far less profitable as regards weight of fleece, &c., than formerly in the days of the *old-fashioned Merino* sheep, when they were in their glory, before the unfortunate introduction of the delicate *Saxon* race, the cross of which ruined all the best Merino flocks of this country. How to regain or restore their lost excellence, is the question. A good available method of obtaining that important result, would be truly a desideratum; and he who should be able to point it out and bring it within the reach of the farmers and wool-growers of our country, would be a public benefactor.

In your article on "Sheep Husbandry," at page 159, of Vol. I. of the *Agriculturist*, you recommend where *wool* is the object, the use of Paular, and of Rambouillet Merino rams. As to *Paular* bucks, it strikes me that you might, for any practical purposes, just as well have advised a cross of the fabulous unicorn, for it would be just as easy to find the one as the other at the present time in the United States; for depend upon it, there is no such thing now existing, as a *Paular buck*, nor anything deserving the name in the whole country. Your recommendation, however, as to the rams, was certainly a good one, if such sheep as you named could be found in the country; but there lay the difficulty, as I had reason to know, for I have formerly taken no little trouble to investigate the matter, and with uniform results. When the wool-growers generally had discovered their error, in adopting the delicate and light-fleeced Saxons, and would have returned to the hardy and more profitable old-fashioned Merinos, many persons in various parts of the country claimed then, as they do now, to have the true sort, "the real Simon Pure," and some of them doubtless honestly believed they had,—but they were mistaken. I have myself gone great distances to find the right sort, and have been invariably disappointed. Sometimes formerly, I have been induced by the strongest representations and assurances, to purchase such as were said to be pure Merinos beyond any doubt, but always found afterward, that it was a *mistake* as to their being pure old Merinos. The experience of many other persons, some of the best judges in the whole country, will confirm what I say. The fact is, that for quite a number of years past, there were *none* of the old Merinos, in the whole country, strange as it may seem, not one remaining of unquestionable purity of blood, *none that could be relied on*. The *only* exception now to be found, the public are indebted to you for their knowledge of, (and I cheerfully acknowledge my own obligation to you for it); I refer to the small breeding flock of pure Merinos at Hartford,

Connecticut, lately imported from the royal Rambouillet flock, which you discovered and reported in your September number. That importation of pure fresh Merino blood, I look upon as being opportune and of great value and importance to the whole country, if, as will doubtless be the case, the growing of fine wool is hereafter to be an object of consequence and of profit in the United States.

I observed with some interest and curiosity, a notice which you gave in your August number, that you had received a letter from a correspondent with specimens of Merino wool, and a portrait of a Paular buck, which "you should give in your next." I was curious to see what sort of a Paular buck it would prove to be, and accordingly looked for it in your September number, where at page 178 I found the promised letter of Mr. Jewett of Vermont, but not the portrait of the Paular buck. But I suppose that we have probably seen in the August number of the Albany Cultivator, the portrait referred to. Being without information from Mr. J. as to the pedigree of his buck, and how he was bred, we can not decide *what* he is, but *whatever* else that ram may be, I will venture the opinion that he is certainly *not* a Paular. Such use of the fair name of the *Paulars* is beyond all question *libellous*, though perhaps *not actionable* in the Vermont courts of law. Sheep, as well as other things, should be called by their right names, though in justice to Mr. Jewett, I would disclaim imputing to him anything like unfairness of intention, in selecting a popular specific name for his sheep.

But a single glance at the *portrait* of the buck, or the slightest examination of his fleece, would be sufficient to settle the question, not only that he is *not* a Paular (unless greatly changed or deteriorated from the original), but would also authorize the belief that he is *not a pure bred Merino of any sort*, but a mongrel sheep of some kind or other, very likely having a cross of some sort of large English sheep just by way of "improvement," though, if so, doubtless it was without the knowledge of the present owner, and prior to his possession of the blood. It would take much to satisfy me that this is not the case,—but however that may be, I am well assured that the ram is not a genuine Paular, for if we may rely at all on the faithfulness of the portrait, or judge by the quality of his fleece, he is eminently destitute of some of the most essential characteristics and distinctive peculiarities of the Paular sheep, which are distinguished among other things, by a greater and more evident degree of *throatiness* than any other flock of Merinos in all Spain. Their fleece is also among the finest and best of all the choice travelling flocks of Spain; so much so, that for many years the exportation of the Paular wool from Spain was strictly prohibited, the whole of it being retained for the use of the royal manufactory of cloths, at Guadalajara. Yet Mr. Jewett, in his letter accompanying the portrait of his buck in the Albany Cultivator for August last, speaks thus doubtfully as to the quality of the wool. He says (to quote his own words): "The wool from these Paular Merinos is not as fine as some other varieties, but I

think they should be classed among the fine-woolled sheep."

When, let me ask, was there ever heard before, a *doubt* whether the Paulars would take rank, and a *high rank* too, among the fine-woolled sheep? But after seeing the fleece of his (so-called) Paular buck, no one will wonder that Mr. J. should speak doubtfully on the subject. If his ram was a specimen, he might well doubt. We have no sort of doubt about it; we say unhesitatingly that such wool as that of the ram above spoken of, is not entitled to be classed among the fine wools, nor should the ancient and most highly valuable Paular Merino race, be discredited by such use of its name—for assuredly the fleece of the Vermont ram in question, is no more like the real Paular wool of Spain, than it is like the South Down or some other of the harsh* kinds of English wool, which it somewhat resembles.

Pardon the unintended length of my "Paular" lucubrations, and believe me,

Yours, faithfully,

EXAMINER.

New York, Feb. 28th, 1843.

P. S. What has become of the promised "Essays" on sheep, which, in your preface to your own article on Sheep Husbandry in your August number, you told us you were in daily expectation of receiving from *two* of your valued friends? Surely they have not *both* disappointed you, or have we already had the said essays, and digested them "without knowing when good cometh?" After such a flourish of trumpets, we expected something not only instructive, but interesting, though upon an old subject. In all other respects, I think your journal and its editors have not only redeemed their promises, but fully met public expectation.

For the American Agriculturist.

CULTIVATION OF MADDER.—No. I.

The great depression in every kind of agricultural produce, makes it the duty of patriotic citizens to point out any new vegetable products wanting in the practical arts. Of these there are some five or six, hitherto imported from foreign countries, that can just as well be grown by our farmers as by foreigners. These are madder, Indigo, Sicilian sumach (*rhus coriaria*), Italian sumach (*rhus cotinus*), weld (*residæ lutiola*), and woad.

I undertook to bring these articles to the attention of our agriculturists some fifteen years since, but the then high price of produce paralyzed the effort. I will again bring them to their notice, and I hope with better effect. Gibson quotes a wise maxim from the Zendavesta. "He who sows the ground with care and diligence, acquires a greater stock of religious merit, than he could gain by a repetition of ten thousand prayers."

I shall in this article treat of the cultivation of madder. The consumption of it is very large, and would require many thousands of acres to supply

* NOTE.—We must explain that the term "harsh" by our correspondent, is not used here in an invidious, but a technical sense.

the home market. I believe the cultivation of madder has been successfully prosecuted on a small scale, in the neighborhood of Utica, State of New York, for some years past. About the year 1816, I bought some dried roots in the market of Cynthiana, Kentucky, that I found of very good quality. I have tested some roots brought from South America, where, I am informed, it grows wild, and it proved superior to any European madder I ever used. Mrs. Madison made a report to the Philosophical Society of Philadelphia, many years since, on madder raised under her direction, and the report was accompanied with a sample of cotton dyed an Adrianople red, that has never been exceeded in color by any European dyer.

D. Ambourney informs us that the roots taken from the ground and washed, will, by using four pounds for one, produce all the effect of the best prepared. This fact is highly important to manufacturers, as it points out to them an easy and cheap way of obtaining the article for their own consumption, at less than half the price paid by them for the foreign article.

These facts will prove incontestably, that our soil and climate are admirably adapted for the cultivation of madder. The only impediment to our success lies in the fact that it requires from two to three years to realize a crop, and our farmers are ever impatient for quick returns. I shall commence by describing the mode of culture, and then give the process of drying and grinding for distant markets.

PREPARATION FOR THE CROP.—It will be necessary to plow the land deeply for madder, before the winter, into high ridges, in order that it may be exposed to the action and influence of the frosts and the atmosphere. Early in the spring, these ridges should be well harrowed down by a heavy long-tined harrow, and then plowed again in the contrary direction to a good depth; and after this, when the land is not perfectly clean from weeds, or not rendered sufficiently fine and mellow, another plowing and another harrowing should be given. In the last operation, the ground should always be left in as level and even a state as possible. It is then ready for the reception of the plants.

SOWING AND PLANTING.—The sets or plants may then be obtained either by sowing the seeds upon a bed of earth which is rich, and made perfectly fine by digging and raking in the spring, and then lightly covering it, or from offsets or suckers from the old plants. In the first method, on the plants appearing, they should be made perfectly clean by weeding, and to be set out at the distance of three inches in the beds by the hoe; in this way, by keeping the ground quite clean and well stirred about the plants, they will be ready to set out in the second autumn, though it will be mostly better to defer the business till spring. It requires about thirty thousand plants for setting an acre of land. The most suitable time for taking the sets is shown by the plants having attained the height of ten or twelve inches from the ground, and the suckers having thrown out fibrous roots from their bottoms. This may be seen by drawing up a few of the plants, and usually about the latter end of

May or beginning of June. Besides, it is necessary that the sets shall have formed root-fibres at the bottoms, before they are removed, as where that is not the case, they never succeed well.

The land being prepared as directed, and the plants provided, a sufficient number of laborers are to be employed, that the work may be performed as expeditiously as possible. In taking off the sets much care is necessary not to injure them. The number of plants that can be set in a short time should be taken up at once. They should be prepared by having a third part of their tops cut off. A sort of thin batter should be made by mixing good vegetable mould and water well together, and as madder roots contain a large portion of free potash, I would recommend an addition of half a pound of potash to the batter used for the shoots, for every five pounds of fine mould; and this first dissolved in the water before mixing with the mould. Into this batter the roots and the sets should be well dipped before they are placed in the earth, as by this means the necessity of watering the plants afterward is prevented. This work is executed by a person before the planting commences. Two others are employed afterward in distributing the plants, so as to be convenient for putting them into the ground.

These sets, after the land has been formed into beds, five feet in breadth, with two feet between each for intervals, are put in by means of a line and a dibble, beginning at a distance of six inches from the outside, and setting a row of plants at a distance of five, six, or more inches from each other; then removing the line two feet farther on them, and putting in another row, and so on, till the bed is finished. In this way each bed contains three rows of plants, at two feet distance each.

AFTER CULTIVATION.—As some of the plants are liable to die soon after the work has been performed, it is necessary, in the course of two or three weeks, to look over the ground, and put fresh vigorous plants in the places where the others have been destroyed.

It is of the greatest consequence to the growth, that it be kept perfectly clean from weeds, and that the mould be occasionally stirred about the shoots of the plants.

The insect about which our correspondent inquires below, was formerly quite common and very destructive among our conservatories in this city and Philadelphia, and we are indebted to Mr. George C. Thorburn for the following remedy, which has invariably proved effectual here.

Wash the whole of the bark and branches of the orange-trees with a strong decoction of ley and soft soap. Apply it with a stiff finger-nail or other convenient brush, manageable with the hand; after which, syringe the tree freely with clear water through a powerful green-house hand syringe. By continuing the syringing two or three times a day for a week, you will get completely clear of them; and by an occasional syringing, they will never again be

troublesome. These insects, as well as the red spider, are effectually routed by free watering of the leaves and bark of the orange trees.

For the American Agriculturist.

REMEDY FOR THE COCUS ON ORANGE TREES.

St. Augustine, East Florida, March 8, 1842.

TO THE EDITOR OF THE AMERICAN AGRICULTURIST, Sir: I am now cultivating a somewhat extensive grove of orange trees in this city and vicinity, and am very desirous to obtain information from you, as to an effectual antidote for a very destructive little insect, called the cocus, which has been for the last two or three years injuring, and nearly destroying, in some cases, our orange trees. I send you enclosed a piece of the orange bark, covered with the insect. It inhabits the long shell or house adhering to the bark, and is so small as to be imperceptible to the naked eye, but is seen by the magnifying glass in great numbers and in lively mood, in the months of April and May. They multiply very rapidly, till they cover all the smaller branches of the orange and its leaves, and soon kill the upper parts of the tree. They threaten the entire loss of this our most valuable production, (just recovering now from the great frost of 1835,) unless we can find a remedy.

We have thrown dry ashes and lime over the trees when wet,—whitewashed, and once applied whale-oil soap, at the rate of 2½ lbs. to 16 gallons of water, and in some cases, have added to the wash 2½ lbs. sulphur and 2½ oz. nux vomica. None of these applications seem to be effectual except the last, which had some influence in checking them. You will confer a favor on me and on this whole community, as well as South Carolina, Georgia, and the West Indies, (for they all suffer from the same insect,) if you can give us information of an efficacious remedy; and in return for such, we should no doubt soon be able to send to you forty shiploads of our most delicious and valuable fruit.

Yours, very respectfully,
FRANKLIN Y. VAIL.

For the American Agriculturist.

STANDARD OF CHARACTER FOR PRIZE CATTLE.

MR. EDITOR—Sir: It is generally understood, I believe, that the object of offering prizes for the best stock, by the State Agricultural Society, is to collect together animals from different sections and from different herds, that a comparison may be made by placing them side by side, that their merits or demerits may be fairly tested. A farmer, living in a remote section and not in the habit of visiting, except in his immediate vicinity, may suppose that he possesses the finest animals in the country, which is very natural, as he has probably never seen any better or perhaps equal, and his being much superior to those of his neighbors, he rests perfectly contented. This I consider a very dangerous situation for a breeder to be placed in. It is only by comparison that his eyes will be opened,

or that he can be convinced of his error; when by ocular demonstration, the defects of his animals will be so apparent, that he will return home with a determination to improve, until he shall arrive at the acme of excellence.

These exhibitions are a school for the novice, the young, and inexperienced. Here they not only find some of the best animals in the state, but they meet gentlemen from all parts, interested in the same pursuit, hear the different opinions, and see the good and bad points pointed out, which perhaps heretofore had escaped their notice.

And now let me ask, how many of those persons generally selected as judges of stock, know what points are necessary to constitute a perfect animal, or one that approaches nearest? I must confess my own ignorance, and seek for information. At present, there is no rule or criterion for the government of the committee, and they are left to decide according to their whim or caprice. We want enlightenment on that subject; and for that purpose I coincide with the suggestion you made, page 140, Vol. I. of your paper, that the "chairman of each committee mount the rostrum, the animal or manufactured article be brought out before the public, and then the explanations for their decisions be set forth at large."

"What a school would this be to the rising and ay to the risen generation. A person might learn more by attending one such day's exhibition and explanation, than from studying books, and plates, and animals, unaided by the opinions of others, for a month."

As the awards and the reports are now made out, we are left in the dark, and drive home our animal, without knowing why he was or was not successful. The writer speaks feelingly on this subject, as he exhibited an animal last fall, in the first class of bulls, to which was awarded the third premium. One of the committee was asked where his bad points were, or why he was placed third? The answer was, that his head was short, and *his horns a little too long!* Now this was news to me, and *my eyes were opened*, for I must confess I had not noticed it before; and I returned home with a determination, that if ever I exhibited him again, I would saw off his horns: but this or something else so affected the animal, that he sickened and died in less than one month afterward!

At the annual meeting of the N. Y. State Agricultural Society, in January last, the writer called attention to the propriety of "erecting a standard of character for every class of stock to be exhibited hereafter for prizes; and also a standard of form, and every point necessary to constitute a perfect animal, to be noticed according to its influence in the decision of the judges."

This excited considerable interest, and some debate as to the manner in which it could be effected, and finally resulted in the following resolution offered by Mr. Rotch:

"Resolved, that the executive committee be requested to call a meeting of breeders, at such time and place as they may deem proper, for the purpose of discussing the different points of merit in domestic animals, with a view of arriving at

some definite opinion as to the points most desirable to be attained in breeding."

As this subject is not only a very interesting but a very important one, and requires some agitation, I am induced to throw out the following hints, and solicit others to give their ideas and opinions upon it.

We will suppose, for example, that the following should be agreed on as the points of horned cattle for comparison, and that the animal combining or possessing the greatest number of these points, shall be deemed most meritorious.

1. Head small with a bright and prominent eye.
2. Horns small and tapering.
3. Neck small at the junction with the head, and gradually thickening to the shoulders.
4. Brisket broad, deep, and projecting well forward.
5. Shoulders full and no hollow behind them.
6. Body deep, round, and capacious; back straight.
7. Loins broad, and wide between the hips.
8. Legs short, full, and muscular above the knee—small below.
9. Flanks well let down.
10. Tail set on even with the line of the back, small and tapering to the end.
11. Broad in the twist, and if a cow, large milk veins and capacious udder.
12. Though last, not least, soft silky hair, thin skin, and good handling of the flesh.

Other points might be given, but the above will exemplify my ideas on the subject.

Truly yours,

C. N. BEMENT.

Three Hills Farm, March, 1843.

The soil in the country from which the letter below is dated, and in fact, in quite a district of country around, is exceedingly fertile, and somewhat peculiar. It is found, upon strict analysis, to be totally destitute of silex; plows, consequently, of the least roughness of mould-board, clog badly in the soil, and do their work imperfectly. Wrought-iron shares, polished in the finest manner, are most used, and found to work easiest and best. We make these observations, in order that Mr. Williams may be properly understood by those settled on different soils, where a rough cast-iron plow works as well as any other.

For the American Agriculturist.

A WORD ON KENTUCKY PLOWING.

Centreville, Ky., March 20, 1843.

LET the plow be the best that can be had, one that runs steady and deep, freeing itself well from the mould, and casting off all litter and stubble with ease. The rounded plow is the best in use here—the diamond next. No plow can work well if it is not as bright as a dollar, and one that will not become bright is a nuisance. Let the team be strong and steady, in good heart, and true to the rein. Do not use double trees (they are too heavy) or chain stretchers. Use the stretcher made from rod iron, having an eye in the centre, by a twist in the rod, to receive the clevis, and a link at each end for the cross piece. This enables

the plowman to give his team as short a draught as is desirable. Do not plow in depth less than four inches, and as much deeper as the plow and team will work. Let there be no stops in the labor, except such as necessarily occur and such as can not be prevented. A team properly cared for, will keep in heart through the plowing season, with three rests in a day, and these are necessary, and no more. One at mid-day to water, feed, and curry; one at mid-morning to water; and one at mid-evening for same purpose. These last are positively necessary in warm weather, but need not occupy more than fifteen minutes. The plowman should always hold his plow steadily and walk in the furrow.

Plow from the middle of the land out. The usual mode is to plow from the out edge of the land to the middle. In plowing from the middle, out, the team must at each end be turned to the right. In following this course two things are gained: 1. The team has firm ground on which to turn, and is not fatigued by having plowed land to turn on. 2. The plowed land is not trampled by the team being turned on it. In plowing from the out edge of the land to the middle, the team is unnecessarily fatigued by turning on plowed land, and the plowed land is so much trampled as to require a second plowing. Try this; if you have not heretofore practised it, it will be awkward at first, perhaps, but when you adopt it once, you will not be apt to abandon it. These remarks have reference to stubble land, not to sod,—though to some extent they are applicable to sod land.

GEO. W. WILLIAMS.

For the American Agriculturist.

HORTICULTURAL CALENDAR FOR MAY.

DURING the past month, there has been much wet weather, and the ground having become fully saturated, vegetation is advancing with great rapidity. Those, therefore, who may not have had opportunity or leisure to attend to the suggestions of last month's calendar, will be compelled now to redouble their exertions.

KITCHEN GARDEN.—In the fore part of this month all the early cucumbers, melons, cabbages, cauliflowers, lettuce, radishes, &c., which have not been taken out of the hot bed, should be removed and transplanted into the open ground.

THE SEEDS.—All kinds of table vegetables, such as peas, beans, beets, onions, parsnips, carrots, and esculent herbs, should be sown early. Tomatoes, egg-plants, peppers, &c., can also be planted out.

FRUIT GARDEN AND NURSERY.—All kinds of fruit and forest trees and shrubs that have not leaved out, should be transplanted immediately. Spring inoculating may still be performed in the early part of the month. Strawberry beds may also be planted out, and the suggestions in the April calendar for pruning be observed.

ORNAMENTAL GROUNDS.—The borders of the flower garden should be finished, and perennial herbaceous plants transplanted. Sow seeds of autumnal flowers in seed beds, to be transplanted at a future time. Set out box edging early in the month, or it will be liable to suffer from the drought. Trim hedges and shrubs. Give the lawns and pleasure grounds a top dressing of ashes or stable manure, and put the gravel walks and carriage ways in order.

S. B. PARSONS.

FOREIGN AGRICULTURAL NEWS.

By the Steam-packet *Britannia* we have our files of European journals up to the 4th of April.

Markets.—Cotton, 60,243 bales had been received at Havre, 290,000 at Liverpool during March, yet notwithstanding this large quantity and the great excess of importation into these ports over that of last year, the price has slightly advanced within a few days, and it is the general opinion that it can not go lower. The week previous to the sailing of the packet, 23,000 bales out of the large sales had been taken on speculation. Grain and Flour still continue dull. Pot and Pearl ashes were brisk. Lead dull—Turpentine difficult of sale—in Provisions a large business was doing, and more extensive sales looked for the present month.

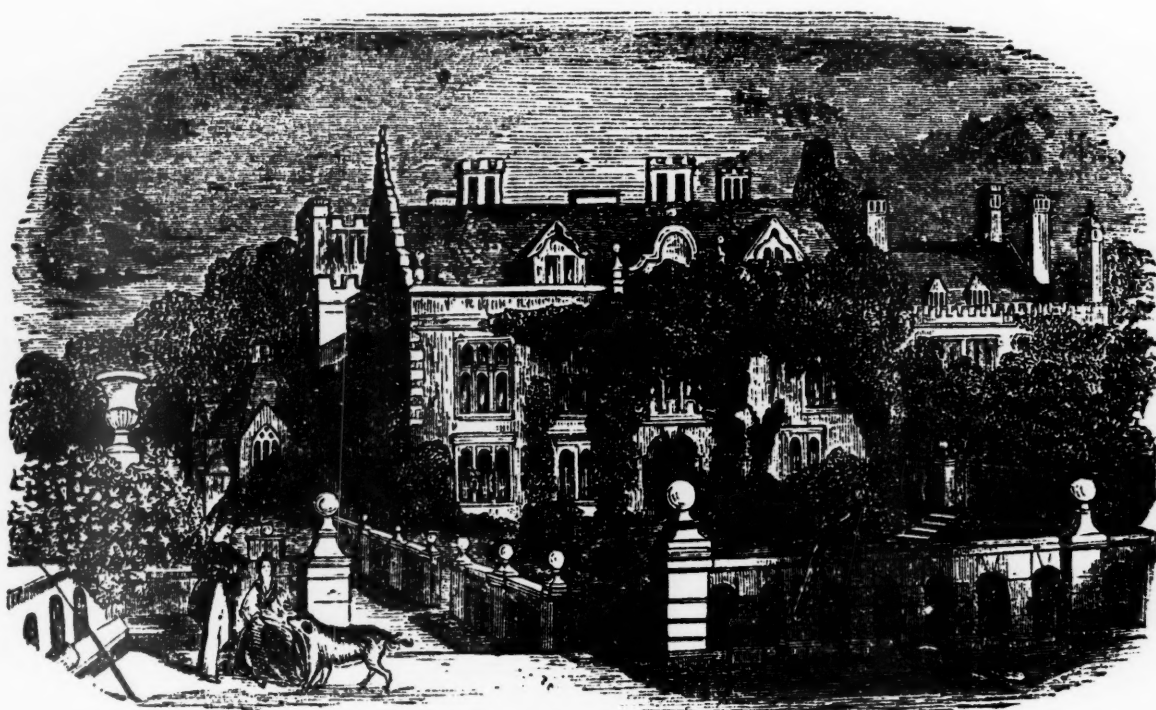
Cheese rather retrograding. Tobacco no material change. Tallow higher. Upon the whole, a decided improvement had taken place in trade, and a continued increase of commercial prosperity is predicted.

Money.—There is no change in fiscal affairs since our last, and capitalists find much difficulty in investing their money, even at the lowest rates of interest. The *Britannia* has brought out upward of a million and a half of gold.

The Corn Laws.—The British Government proposes to introduce a bill on this subject after Easter, which will probably be quite as favorable, if not more so, than the present tariff. In the meanwhile, all manufactured flour in Canada from grain grown in the United States, is received in England at the lowest duties as colonial produce.

We present to our readers a front view of Newstead

NEWSTEAD ABBEY.—(FIG. 13.)



Seat of the late Lord Byron.

Abbey, the late residence of the celebrated poet, Lord Byron. We look upon this building as a rare gem of architecture, and well worth the study of country gentlemen in the United States, who wish to build on rather an extended scale. The front, partly enveloped in the "ever ivy green," is at once noble, rich, and beautiful, and can not but command admiration. Byron described the Abbey, as

"An old Monastery once, and now
Still older Mansion—of a rich and rare
Mixed Gothic.

Embosomed in a happy valley,
Crowned by high woodlands."

Heating Conservatories.—By means of a stove 1 foot 6 inches square, and 3 feet 9 inches in height, and two copper cylinders of the same dimensions, containing boiling water, a conservatory 67 feet long, 27 feet wide, and 21 feet high, is sufficiently well heated, with a consumption of only one bushel of coke per day.

Paulownia Imperialis.—This beautiful shrub has proved sufficiently hardy in Paris to stand the winter,

and it flowered in April. The flowers are of a fine blue, somewhat like those of *Gloxinia Cavescens*, and they have an agreeable smell like those of the *Philadelphus*. It has become so abundant now, that the price has fallen from 5 guineas to 2s. 6d. It is said that commercial gardeners have made more money by it, than from any other plant known.

Remarks on the laying out of Cemeteries, and the Improvement of Church-Yards; forming an octavo pamphlet of 130 pages, with above 50 engravings, has recently been published by Mr. Loudon. It is a work well worthy the attentive perusal of the American reader, for as a people, we are shamefully deficient in a proper care of these sacred grounds.

To prevent Mice from destroying early-sown peas.—Take a few small slices of bread, and dust a little arsenic on them. Place these slices on different parts where the peas are sown, and cover them over with pots or anything, so that nothing but the mice can get to the bread.

We think this would be an excellent plan to adopt

to destroy mice in the winter harboring round fruit-trees.

Use of Charcoal in the Culture of Plants.—Almost every foreign agricultural publication that we take up is teeming with articles upon this subject, and from numerous experiments by the Abbé Piccone, he proves it without doubt an efficacious manure. It consists principally of oxyde of carbon, the primary element of vegetable productions. It is also found an excellent preservative from drought, and is sought for with avidity to spread upon ground liable to be burnt by the sun.

Mr. Partridge, of this city, in one of his articles on city manures, which appeared in our December No., pointed out the use of charcoal and the waste of it here. When the value of such things becomes better known and appreciated among our farmers, we trust that our corporation will be able to receive \$61 500 per annum, rather than pay it out for the sweeping of the streets and carting away the offal. Several of the cities of Europe obtain considerable incomes from these sources; and we believe that our sister city of Boston, in Massachusetts, also does the same.

Preservation of Grapes.—Cut the grapes from the vine, with one or two joints of wood from below the bunch, and apply hot sealing wax to the end when cut off, and seal it closely, so that no air can enter into the tissues communicating with the bunch. They must then be hung upon suspended cords in a cool airy room, taking care that they do not touch each other, and are not exposed to currents of warm air, nor where it is so damp as to cause mould, and they will thus keep for months.

The American Agriculturist.—We observe our paper regularly advertised for sale in London, and we have already received several subscribers from Great Britain and on the continent, and are promised a considerable increase to our list as soon as the work becomes more known. We are certainly very grateful that our humble labors in the cause of agriculture should be so flatteringly appreciated abroad.

The Bolt Grub, hitherto so destructive to cabbages, brocoli, and cauliflower, are effectually got rid of by simply soaking the seed in brine previous to sowing.

To destroy the Red Spider and other insects.—Steep a quantity of bruised laurel in water for a day, and forcibly syringe the leaves of any infected plant or tree with the liquid.

If our correspondent, Mr. Vail, does not find what we recommended, page 55 of this No., efficacious in destroying the cocoon on his orange trees, he will do well to try the above. We presume the laurel recommended is the same as our own, that grows so abundantly over the whole country.

The Colored Embellishments of Paxton's Magazine of Botany for April, are *Lælia Acuminata*, acuminate-lipped Lælia; *Hovea Pungens*, var. Major, pointed-leaved Hovea, large variety; *Lantana Crocea*, copper-colored flowered Lantana; *Ribes Albidum*, whitish flowered currant. The lantana is a rich, gorgous flower, and the currant particularly delicate and pretty.

Mould or its Principles in the Juice of Plants.—Mr. Hermann, of Moscow, thus writes to the editor of the Journal of Pharmacy: "I have just made a discovery which will certainly prove to be of great importance in many respects, viz. that the chief part of the extractive components of the juice of plants, and therefore those of officinal extracts of plants likewise, consists of the principles of mould; and I distinguish in these juices the following substances in particular: humic acids, mould-deposit acids, apocrenic acids, crenic acids, and extractive humus."

"This discovery will, I hope, decide the question at present so much agitated, on the nourishment of plants, as it is highly improbable that these mouldy substances contained in the juices of plants, should not have been absorbed from the mould earth (humus), but formed from carbonic acid, ammonia, and water, by the vital process of the plants."

Agricultural Chemistry rendered Simple for Practical Purposes, by Thomas George Tilley. Parts I. to IV. of this work are announced as already issued from the press in London.

Johnston's Lectures on Agricultural Chemistry, Nos. XXX. and XXXI. for April, treat of the use of vegetable and animal manures, and give 27 pages of experiments made with them upon different crops. These Lectures, and especially the experiments, ought to be in the hands of every enlightened farmer. They are of great value, and would be worth their cost to any one engaged in agricultural pursuits, ten times over every month of his life. We take pleasure in adding, that two volumes of these lectures have been republished by Messrs. Wiley and Putnam of this city, and that a third volume will be given by them as soon as all the parts necessary for it are issued from the English press.

The Ladies' Flower-Garden, by Mrs. Loudon.—Volume I. of this magnificent work is now completed. It is in quarto with XLV. superb colored plates, and letter-press to match; giving a history of the flowers figured, and the best method of cultivation.

Manure for Turneps.—Forty bushels per acre of common cinder ashes, mixed with three or four gallons of train oil is found to be an excellent manure for turneps.

Common Salt for fixing Ammonia.—It is stated in the Farmer's Herald, that common salt scattered on the dung-heap has been found effectual in fixing ammonia, for it immediately unites with the carbonate of ammonia as it is formed, and a double decomposition takes place, producing muriate of ammonia and carbonate of soda.

THE DUKE OF NORTHUMBERLAND.—We have the pleasure of presenting to our readers on the opposite page, another portrait from the celebrated stock of Short-horns, belonging to Thomas Bates, Esq., of Kirk-leavington, England. The pedigree of this animal is of the deepest kind, and his appearance is equal to his breeding. The artist has hardly done him justice in the loin and quarter, but his beautiful, fine, masculine head, wide, deep brisket, and round barrel, are to the life. His color is a rich roan, intermingled with a few patches of red and white. He is an animal of great presence and finished action, and upon the whole, the choicest bull we ever looked at. He has been repeatedly exhibited with his dam, Duchess 34th, at the great Agricultural Shows in England, and was never beaten.

Production of Fat and Muscle.—Mr. Karkeek, of Truro, delivered an excellent lecture on this subject before the Probus Farmers' Club. We see little, however, in it that has not been said before by Leibig, Bousingault, and one of our own correspondents, Mr. Lewis of Kentucky, in the April No. of this paper. We quote two paragraphs from the Lecture.

"All the carbon of the food, not consumed in the lungs, was actually used in producing fat, and that the amount of nourishment required for an animal must be proportioned to the quantity of oxygen taken into the system. And as air was expanded by heat, and contracted by cold, it was evident that equal volumes of hot and cold air must contain unequal weights of oxygen—ergo, a larger quantity of food is required

DURHAM BULL DUKE OF NORTHUMBERLAND.—(FIG. 14.)



The Property of Thomas Bates, Esq., Kirtleavington, England.

DESCRIPTION AND PEDIGREE.—Color roan; calved Oct. 15th, 1835; got by Belvidere (1706); dam Dutches 34th (p. 356, Vol. 3d of Herd Book, and whose portrait was given in April No. of Am. Agt.), by Belvidere (1706); d. 2, Dutches 29th, by Second Hubbuck (1423); d. 3, Dutches 20th, by the Earl (1511); d. 4, Dutches 8th by Marske (418); d. 5, Dutches 2d, by Thelton 1st (709); d. 6, Dutches 1st, bred by Charles Colling, by Comet (155); d. 7, by Favorite (252); d. 8, by Daisy Bull (186); d. 9, by Favorite (252); d. 10, by Hubbuck (319); d. 11, bought by Charles Colling, in 1784, the last of the Duke of Northumberland's celebrated stock of short Horns, by James Brown's old red bull (97).

when animals were kept cold, than when they were warm. This was clearly explained by reference to the voracious appetites of the Arctic savages for train oil, tallow candles, and animal food, compared with that of the Hindoo, living chiefly on rice and vegetable food.

"The practical deductions which he drew from these facts, were the necessity of keeping animals warm, and perfectly quiet while in a state of feeding. The effect of exercise being to increase the circulation and quicken the respiration, and the consequent consumption of a greater quantity of food."

That animals as a general rule for a certain time, will fat faster without exercise than with it, we grant; but the meat is not near as lean and palatable; the animal also, as we have before stated, is always more or less feverish, and in fattening our own stock we have ever allowed them a moderate degree of exercise. This we contend is necessary to the production of good and healthy meat, and such as is most profitable for the consumption of man. It is a point that theorists in writing and lecturing almost invariably overlook, and the consequence is, that although they may benefit the producers of meat, they will do the consumers a great injury. Who would not choose at his table between lean, tender muscle, and meat more like untried lard, beef and mutton tallow, than anything else to which we can compare it. From the Reports of the Royal Agricultural Society councils, held in March, we gather some items.

Recipe for the Cure of Red Water in Sheep.—Take epsom salts, 6 ounces; nitre, in powder, 4 ounces; boiling water 3 pints, poured upon the salts and nitre. When milk-warm, add spirits of turpentine, 4 ounces; bole armenian, in powder, half an ounce. Mix and shake the whole well together when given. The dose is from three to four table-spoonfuls, and the sheep must be bled before administering the medicine.

Agricultural Tour in Spain.—Dr. Daubeney was to set out in a few days, on his tour of inquiry through Estramadura, and other districts in Spain, for the purpose of examining the phosphorite mineral, containing so large a proportion of the earth of bones, and making other agricultural observations.

Consulting Chemist of the Royal Agricultural Society.—Dr. Playfair is elected to this highly honorable and responsible office.

Alsike Clover, or Trifolium Hybridum.—This is a new kind of clover recently come into cultivation in a few instances. It is represented as throwing out an uncommon number of stems from the same root, as many as thirty in some instances, resembling those of the common red clover. The blossoms are of a pink hue, and it is thought to be a hybrid, between the white and common red clover. Others state that this clover is a native of Sweden, where it has long been cultivated, and that it has been known in Scotland since 1836. It yields well on good soils, and the peculiar merit claimed for it is, that it *withstands frost* better than any other variety. It is a perennial, sprouts rapidly after cutting, has a horizontal growth, and makes an excellent sheep pasture.

Bokhara Clover.—Specimens of this were exhibited nearly thirteen feet in length. It is a coarse weed, and notwithstanding the attempts to get it into cultivation among the farmers, it is generally condemned as worthless. See its identity with the sweet clover proved by Mr. Hepburn, page 149 Vol. I. of American Agriculturist.

Experiments with Guano.—Mr. Gibbs has furnished a valuable table of experiments with this manure in cultivating turneps. We have also received a tract

of 36 pages, entitled "*Guano, its Analysis and Effects Illustrated by the Latest Experiments,*" which will be at the service of such of our friends as wish to call and consult it. This tract comes as a sort of appendix attached to the London Farmers' Magazine.

To destroy Caterpillars on the Gooseberry-bush.—Make a strong decoction of fox-glove, or strong alum-water, and sprinkle on the leaves when they are dry. Another method recommended of guarding cabbages from the above, is to sow the borders of the field with hemp.

Will any of our friends at the west inform us whether the hemp crop is a preventive against the ravages of the army-worm, and will they make some experiments upon the subject?

To Kill White Worms among Cabbages.—Count de Gourcey, in his Agricultural Tour in England, states that Mr. Mure strewed a bed of cabbages with nitrate of soda after a rain, and the ravages of these insects immediately ceased.

THE LONDON FARMERS' MAGAZINE for April, we find much more spirited than that for March, and the editor continues in it the translation of Count de Gourcey's Tour as above. It is an interesting part of it; but we are sorry to see such statements as he makes of cows giving 38 to 45 quarts of milk per day, for *months in succession*. Mr. Fandley, of Maybole, must have been gammoning the Count, or the Scotch quart is of a very different dimension from the English beer quart, which is the standard in England and this country for milk measure.

Asparagus.—In the Gardeners' Chronicle we see it stated, that asparagus is grown in Germany of great size, white and very tender, and to produce it, the following mode of treatment was adopted: As soon as the young shoot was perceived issuing from the ground, a piece of hollow reed, cane or elder, about eight inches long, and of sufficient bore, was stuck down into the clay above the shoot, for the latter to grow into. The longer and wider the joints of the tube, the greater was the success. The asparagus, when it had filled the tube, was cut, and proved excellent and of an enormous size. A number of common flower-pots placed over asparagus beds, produced shoots of great size, perfectly white and particularly tender. In some instances, where the pot was not sufficiently high for the growth of the shoot, when it met the bottom of the pot, it coiled itself round, but still continued close headed, and did not branch out, or become hard. Tin tubes answer the same purpose, and joints of the bamboo are perhaps best of all. The tenderness of the plant arises from the exclusion of light, by placing over it an opaque hollow tube.

Falstaff Raspberry, is highly spoken of, as a very superior kind.

White Carrots.—The cultivation of this root is attracting considerable attention among farmers in England at present, as well as in this country. It is stated in some instances to yield 30 tons to the acre. Lord Ducie regularly obtains an average of 24 tons to the acre; and Mr. Harris estimates the tops to be equal to a second crop of clover. It has been common in Flanders and Germany for two centuries.

Early Vetches.—A kind of vetches is now grown at Isley, that were so early last year, as to be three feet high in the beginning of May.

THE BRITISH FARMERS' MAGAZINE FOR APRIL, is replete with excellent articles; and among others, it gives an abstract of several pages of Mr. Ruffin's Essay on Calcareous Manures. It also quotes three articles of some extent from the American Agriculturist.

Editor's Table.

NOTICES OF THE PRESS.

COTTAGE RESIDENCES, or a Series of Designs for Rural Cottages and Cottage Villas, and their Gardens and Grounds. Adapted to North America by A. J. Downing.—We acknowledge the receipt of the above beautiful volume from the author, and can not but express our unfeigned delight at the publication. We know of but few things which require a greater reform, than the buildings of the country gentlemen of these states. We do not mean by this, that we are destitute of comfortable and handsome residences the country over; but what we mean to assert is, that they are too much on the same plan, so that when the traveller has seen a few towns in America, he has seen all. As a general rule, also, our architecture is too *lavish* entirely, and comfort is not unfrequently sacrificed to show. Another great deficiency about it is, that if the plan of the house be a good one, it is generally marred by the appendages of kitchens, wood sheds, and other outbuildings; whereas, all these should be contained within the main building, and thus leave it surrounded by fine grounds, and presenting a handsome front on every side.

Mr. Downing has fortunately deviated from the general routine of American architecture, and has come out boldly in favor of the old English; and we know of few more beautiful designs, to our taste, than he has given in this elegant work. They are ten in number, each occupying a leaf by itself, and executed in the finest style. Aside from these, the body of the work is illustrated with 80 very neat wood cuts. As an example of one of the most tasteful of these cottages, and to show our estimation of the work in question, we have taken the liberty of nearly imitating that of the design of plate II. in our vignette—and a beautiful Gothic thing it is too. We like the author's remarks generally on architecture, the laying out of grounds, and the disposition of trees and shrubbery, and we bespeak for his publication the attention and favor of our countrymen. In addition to the numerous engravings, it is got up in the very best style of the typographical art, in imperial octavo, 187 pages. Price \$2 50. Wiley and Putnam, publishers.

Mr. Downing's work on Landscape Gardening and Rural Architecture is entirely out of print, a large edition having been disposed of in two years; and we have no doubt this last will be in as great demand.

TRAVELS IN THE GREAT WESTERN PRAIRIES, the Anahuac and Rocky Mountains, and in the Oregon Territory, by Thomas Farnham, Esq.—We are indebted to the author for a copy of the entertaining and instructive work above; and when received, it was our intention to have given copious extracts from it, regarding the natural productions and great capabilities of this far-off section of our territory; especially since the recent movements making toward it, by considerable bands of hardy pioneers, who now propose examining the country, with a view of permanent settlement. Want of space, however, compels us to forbear till another month; and we can only add, that it is printed as an extra Tribune, 112 pages, double columns, octavo, and is sold at the low price of 25 cents. Greely and McElrath, Publishers.

ELLSWORTH'S REPORT. The Improvements in Agriculture, the Arts, &c., in the United States; being an account of recent and important discoveries and improvements in the mode of building houses, making fences, raising grain, making pork, disposing of hogs, making lard oil, raising silk, with engravings of improved plows and other agricultural implements, &c. By Hon. H. L. Ellsworth, Commissioner of Patents.—This is another of those publications from which we intended to have made extracts for the benefit of our readers, but can not at present; nor is it so necessary now, since the same publishers as above have issued it as an extra Tribune, for 25 cents. We trust that all who take the least interest in agriculture, will immediately possess this work, and peruse it for themselves. Few are doing more for the benefit of this great cause than Mr. Ellsworth; and we tender him our best thanks for his able and most excellent Report.

THE MOTHER'S JOURNAL.—We are indebted to the fair authoress, Mrs. Eliza C. Allen, for the first four numbers

of Vol. VIII. of this excellent little periodical. It is published monthly, at Utica, by Bennet, Bachus, & Hawley, at one dollar a year, in advance; each number containing 48 pages of double columns, octavo, with a cover. It is got up in handsome style; and we think, from a rapid glance over its contents, that it is particularly calculated to benefit those for whom it is especially intended.

LEIBIG'S ANIMAL CHEMISTRY.—The first edition of this profound work, printed as an extra New World, having been all sold, Mr. Winchester has now stereotyped it, and can hereafter supply any number of copies at 25 cents each. We are certain that the mere announcement of this fact to the public, will ensure for this cheap edition a large sale.

THE ZINCALI, or the Gipsies of Spain, by Rev. George Borrow, author of the Bible in Spain, is now stereotyped as an extra New World. Price 25 cents.

Another edition of the same work in larger type, is issued by Saxton and Miles. Price 31 cents. It is one of the most curious and interesting publications of the day.

THE ENCYCLOPEDIA OF GEOGRAPHY, by Prof. Murray, assisted by several of the most eminent scientific men in England, is in course of republication in parts, at 25 cents each, by Lea and Blanchard, Philadelphia. It is the best and most able work of the kind on this subject. It will contain 1,900 pages, 1,100 engravings, and over 80 maps, yet the whole cost will only be \$6 complete.

PRAIRIE FARMER, devoted to Western Agriculture, Mechanics, and Education, published at Chicago, Illinois, and edited by John S. Wright; 24 pages, double columns, royal octavo, monthly. Price one dollar a year, in advance. This was late the Union Ag., and now appears in a much superior form, paper, and style of print; indeed, one of the handsomest agricultural periodicals of the day. It is edited with much spirit, and we hope that the western public will fully sustain the publishers in their enterprise; for every state wants and ought to support at least one good agricultural paper, to explain and show forth its peculiar system of farming.

Will the editor please send us the January No. of the Prairie Farmer, as it has not come to hand.

JOHNSON'S ENCYCLOPEDIA OF AGRICULTURE.—This able English work is now republishing by Carey & Hart, Philadelphia, to be completed in 16 Nos., at 25 cents each, or \$4 for the whole, which is only one third the price of the English edition. It is cut down and added to somewhat, by the American editor, to make it more suitable for the farmers of this country. Five Nos. are already issued, but we have not had time to look over them sufficiently, to decide as to the ability and judgment of the editor and his undertaking. The embellishments are much superior to the original work; and we should think under any circumstances, it was well worth the price at which it is offered. It should be in the library of every farmer, it being particularly valuable as a work of reference.

SOUTHERN CULTIVATOR, published at Augusta, Georgia, by J. W. and W. S. Jones. 8 pages quarto, semi-monthly. Price \$1 a year. This is a new agricultural paper, of which the first 4 Nos. are at hand. It is got up in pretty style, and deserves encouragement at the south. We wish, however, that we could see more articles in it on the peculiar crops of this section of our country, in preference to the selections from northern papers. We certainly feel highly complimented by such selections, and if we spoke only in reference to our own interests, would advise a repetition of them; but we do not, and therefore we say, give us *southern* and not *northern* articles for our reading. Though no longer interested, we are not the less obliged to the editors by the flattering notice they give of a certain animal from these parts, recently shipped, Col. Bonner of White Plains. We are satisfied when got into condition, that he will prove all expected of him; or to say the least, his stock will.

METEOROLOGY, comprising a description of the atmosphere and its phenomena; the laws of climate in general, and especially the climatic features peculiar to the region of the United States; with some remarks upon the climates of the ancient world, as based on fossil geology, by Samuel Forry, M. D., author of the "Climate of the United States," &c., with thirteen illustrations. This is another of those valuable works issued by J. Winchester, 30 Ann Street, as an extra New World. It contains 48 pages of fine double

columns, and the embellishments are really neat and highly illustrative. This work of Dr. Forry is one of uncommon merit, and is prepared with great care, after years of study and labor. It deserves the serious attention of all engaged in the important study of meteorology.

SOUTH-WESTERN FARMER, published weekly, at Raymond, Mississippi, by N. G. North. 8 pages quarto. Price \$3 a year. J. Jenkins, M. W. Philips, and N. G. North, editors. This paper commenced its second Vol. the 10th of March last. It has been edited with spirit and ability since its commencement; but it will now be more varied and interesting in its columns, since the addition to its editorial corps of Dr. Philips. We are almost afraid to speak of this gentleman as he deserves, in consequence of his being a correspondent of our own; yet a warmer or more enlarged heart, and one more devoted to the noble cause of agriculture, we do not know. We commence this month the publication of a series of articles on the cultivation of cotton, from his pen. They will be continued monthly, and probably extend to 6 Nos. before being completed; five of these we already have in hand, and we bespeak for them the careful attention of our southern readers, as Dr. Philips is a *practical planter*, a *southern-born and southern-educated* man. But we digress. We like the *South-western Farmer* for one thing particularly, and that is, it talks to us of *southern* agriculture; and for those here at the north who take interest in these matters, we shall be happy to forward their subscriptions to this excellent periodical. Will the publisher please send us No. 1 of current Vol., as it has not come to hand.

THE HONEY BEE, its *Natural History, Physiology, and Management*, by Edward Bevan, with 35 engravings on wood. Carey and Hart, of Philadelphia, publishers. 128 pages octavo. Price 31½ cents. This is a fair average work upon the exhaustless subject of the bee, with better embellishments and more reading matter for the price, than any other within our recollection. We regret that the enterprising publishers did not issue it on better paper, and charge the difference of price on the cost of the work: the matter and illustrations are worthy of it.

THE MEDICAL NEWS AND LIBRARY, 32 pages monthly, double columns octavo. Price \$1 a year, is a recent issue from the press of Lea and Blanchard, Philadelphia. It strikes us as a work of merit; and the articles are written in language so popular, that we recommend it with great pleasure to the attention of our readers. Health is important to all, and this little work gives excellent rules on this subject, and discusses the nature and causes of disease with ability. We shall be obliged to the publishers, by their sending us the first three Nos., and their continuing it in exchange.

BERKSHIRE HOGS.—We clip the following paragraph from the Hamilton, Ohio, *Intelligencer*:—

Many very fine hogs have been driven from various parts of the country; but pre-eminent among them all was a drove of 157 Berkshires, averaging 304½ lbs. net, slaughtered by Thomas Millikin and packed by A. McCleary about ten day ago. These hogs were all bred and fattened by Cornelius S. Hagerman on his farm in Madison township, Butler county, Ohio. Twenty-five of them were only 16 months, and the remainder between 18 and 20 months old. For vigor, symmetry, fatness, and uniformity of size, they were pronounced on all hands the most beautiful and perfect hogs ever driven to this market.















ANCIENT EGYPT.

GEORGE R. GLIDDON, Esq., late U. S. consul at Cairo, Egypt, and for twenty-three years a resident in that country, has recently published through the New World press, one of the most valuable and remarkable books of the age. It is no less than a detailed account of the process by which hieroglyphics have been discovered, classified, and translated: the results of such translation: fac-similes, to the number of several hundreds, of hieroglyphical letters and symbols, engraved in wood expressly for this work; together with translated tables of Egyptian chronology and a mass of well-digested historical facts, establishing the high antiquity of the pyramids, and corroborating the truth of biblical records, in a thousand interesting and striking particulars. As this book is sold for *twenty-five cents*, we take it for granted, that no sensible man in the country will fail to supply himself with it.

That the reader may have an idea of the above work,

we give the hieroglyphics and translation of the most ancient threshing song known in agricultural literature.

A Threshing Song.

	Tread ye out
	for yourselves
	twice (i. e. <i>bis</i> , meaning this sentence to be sung [twice])
	O oxen
	Tread ye out
	for yourselves
	Tread ye out
	for yourselves
	straw
	for
	men
	the grain (a bushel pouring out grain)
	who (are)
	your masters.

Or paraphrased.

Hie along, oxen! tread the corn faster;

The straw for yourselves, the grain for your master.

To CORRESPONDENTS.—M. A. Philips's articles on the cultivation of cotton, up to No. 5, are received with many thanks, and will appear monthly. Obed Hussey, D. S., Wm. Partridge, R. L. A., J. M. Sherwood, Dr. Cartwright, W. H. Sotham, Geo. W. Fahnestock, A. and G. Brentnall, J. R. Barbour, Americus, C. N. Bement, John J. McCaughan, in our next.

We are in receipt of numerous letters from different parts of the United States, all complaining of the hard winter, late spring, loss of stock, great scarcity of forage, &c., &c. Such communications are valuable to us, and we are always obliged to our correspondents for them, although we may not at the time have space for their publication.

S. S. Full-bred Merinos are best for your purpose.

J. B. Mr. Bement has the cuts, and we shall address him upon the subject.

SIDE-HILL PLOWS FOR SALE.

BARNABY & MOOERS'S Patent Side-Hill and Level-Land Plows can be had at the following prices, viz: No. 2, wt. 45 lbs., \$8; No. 3, 70 lbs., \$10; No. 4, 80 lbs., \$10 50; No. 5, 90 lbs., \$11; extra edges, 50 cents. For colter, if added, laid with steel, \$2; and wheel, \$1 50; shin-pieces, 12 1-2 cents.

We give a few of the premiums awarded this superior plow, viz: by the American Institute, at their plowing-match at Newark, N. J., in 1840, the 1st premium—a silver cup. Also, by the same Institute, at their Annual Plowing-match for 1841, at Sing Sing, N. Y., a gold medal, for the best work done, lightest draught, and best principle of construction, answering for "general purposes." The 1st premium of the American Institute for 1842, and the 1st at Philadelphia the same year, and all the premiums in Tompkins county, as well as that of the New York State Agricultural Society, which awarded it an honorary premium of \$30, and equal to the 1st at their Annual Plowing-match at Syracuse, for 1841.

The following are its advantages over the common plow, viz: 1st. Ease of draught. 2d. Perfection of work. 3d. Strength and durability. 4th. All dead furrows may be prevented, as the furrows can all be turned one way. 5th. Any width of furrow may be turned, between 8 to 18 inches, by moving the catches in the cross-piece, toward the handles for a wide furrow, and toward the centre for a narrow one. 6th. Placing the beam in the centre of the cross-piece makes it a "double mold-board plow," turning a furrow both ways at the same time; answering for green-ridging, plowing between corn or potatoes, or any crop cultivated in rows or drills, and for digging potatoes.

Orders for the purchase of Patent Rights, either by States or Counties, will receive immediate attention, and patterns of the various sizes furnished. Also, orders from Farmers, or others, for Plows, will be forwarded according to direction, to any place named, while the patent shall belong to me, if the money, or satisfactory references, are forwarded.

For further particulars, and cut of the plow, see Vol. 1 of American Agriculturist, page 370.

HENRY MOOERS.

Ithica, Tompkins Co., New York.

WHEAT-SHEAF FARM ON STATEN ISLAND FOR SALE.

A recent domestic bereavement has induced the undersigned to offer his residence on Staten Island for sale. It is situated midway of the outer bay, on the sea-shore, eight miles from the Quarantine ferry, three from that of Rossville, and equi-distant from two others—Seguin's landing, and Port Richmond.

The condition of the Farm, the extent, value, and practical usefulness of the improvements, and its peculiar advantages, are sufficiently known. It has been improved in a way to render it susceptible of six farming divisions of thirty acres and upward each, including an appropriate allotment of woodland; each division offering a moderately elevated building location. The condition of the soil is well known to be in the best working order.

Terms to suit the purchaser, as the object is merely to change the investment for another susceptible of equal product.

W. A. SEELY,
218 Fulton street.

New York, Feb. 16, 1843.

SHEEP FARM FOR SALE.

The subscribers offers for sale, or to let, their extensive Sheep Farm, situated in La Salle county, State of Illinois. The Farm consists of upward of 1,500 acres; over 400 being enclosed by substantial picket-fence, and improved; the balance, dry rolling prairie, and timber, most admirably adapted to sheep husbandry, for which purpose it has been used by the subscribers for the last two years successfully.

The Flocks of Sheep can be sold at the same time, if purchasers are inclined. They consist of over 1,500 good, strong, healthy, white-faced Cheviot breed; also, three fine Pauler Merino Bucks, purchased of a celebrated breeder at the east.

If the Farm can not be sold for cash, offers will be received for renting the same for two or three years.

Apply either to JOHN ROSE, Little Vermillion, La Salle, MURRAY & WARD, Chicago, Ill., or JAMES MURRAY & Co., Buffalo, New York; either of whom will give every information wanted.

CHARLES STARR, Jr.,

MENDHAM, MORRIS COUNTY, NEW JERSEY,

Will be prepared, the coming Spring, to execute orders for thorough-bred Berkshire Pigs, from the imported boar Hagbourn, and a superior boar of Windsor-castle family, and fifteen choice sows, lately procured from A. B. Allen, of Buffalo, New York.

Pigs from this superior stock, from 2 to 3 months old, will be delivered, well caged, on shipboard, at New York, for \$25 to \$30 per pair. Feed furnished, when desired, at \$3 per barrel.

Persons desiring either pigs or full-grown animals, can be supplied with all the advantages of Mr. Allen's stock at Buffalo, without incurring the risk and cost of canal transportation—the advertiser's residence being but half a day's journey from New York.

COMMERCIAL GARDEN AND NURSERY.

The proprietors of this establishment have constantly on hand an extensive assortment, comprising every desirable variety of Fruit and Forest Trees, Ornamental and Flowering Shrubs, Roses, Bulbs, Dahlias, and a large collection of Herbaceous Plants, which they are prepared to dispose of on reasonable terms with a liberal discount to the trade, and to wholesale customers. European Privet, of a superior quality, for hedges, will be furnished at reduced rates. Also, Evergreens and Ailanthus, the latter of a large size, suitable for street planting. 10,000 Norway Spruce of small size can be furnished at very reduced prices. Great care has been taken to select the best varieties of thoroughly tested fruits from the most correct sources, and it is the determination of the Proprietors to cultivate only those kinds which ample experience has proved to be of superior excellence, and to succeed well in this country. They are also particularly careful to take no inoculations of grafts from trees whose variety has not been ascertained and accurately tested by the fruit itself—the only mode in their opinion, of ensuring perfect correctness. The varieties of fruit being thus kept entirely distinct, the Proprietors feel no hesitation in warranting the identity of the kinds, and they are persuaded that those who purchase cannot but be satisfied with the quality, both of the trees and of the fruit.

Catalogues with prices will be furnished gratis at either of the above places.

PARSONS & CO.

Flushing, L. I., near New York, 4th month, 1843.

Prince's Linnean Garden and Nurseries, Flushing, near New York.

The following new Catalogues, 32d edition, of this immense collection of Trees, Plants, &c., will be sent to every post-paid application, and orders will be executed with despatch.

- No. 1. Fruit and Ornamental Trees and Plants.
2. Bulbous Flowers and splendid Dahlias.
3. Green-house Trees and Plants.
4. Garden and Agricultural Seeds, with low wholesale prices.
5. Wholesale Catalogues for Nurseries, comprising Trees of smaller size.

Feb. 28, 1843.

WM. R. PRINCE & CO.

N. B. 150,000 Mulberry Trees, 4 to 6 feet high, of the finest varieties, for sale at low prices and liberal terms.

POUDRETTE,

Of the best quality, prepared by the New York Poudrette Company, may be had immediately, in any quantity, in barrels or in bulk, on application to the subscriber. Price, \$5 for three barrels, or \$15 for ten barrels, or 30 cents a bushel, if measured into wagons or vessels at the yard. Letters, post-paid, containing cash, will be promptly attended to, if addressed to

D. K. MINOR, Agent,
118 Nassau street, New York.

March 10, 1843.

Works pertaining to Agriculture for sale by Saxton & Miles, 205 Broadway.

Johnston's Elements of Agricultural Chemistry and Geology, 50 cents; Do. do. 1 vol. 12mo, \$1; Gray's Botanical Text Book, \$1 50; Lindley's Horticulture, \$1 25; Gray's Agricultural Chemistry, \$1; Downing's Landscape Gardening, \$3 50; Do. Cottage Residences, \$2 50; Liebig's Organic Chemistry, \$1 25; Do. Animal Chemistry, \$1; Buel's Farmer's Companion, 87 1-2 cents; Fessenden's Complete Farmer, 87 1-2 cents; Cobbet's American Gardener, 75 cents; Blacklock's Treatise on Sheep, 50 cents; The American Farmer's Instructor, \$1 62; A Treatise on Cattle, \$2 50; Dana's Muck Manual, new edition, 62 1-2 cents; Boswell's Poultry Yard, 50 cents.

BEVAN ON THE BEE—CHEAP EDITION.

THE HONEY BEE; its Natural History, Physiology and Management. By Edward Bevan; with thirty-five engravings on wood. Price 31 cents.

THE RURAL AND DOMESTIC LIFE OF GERMANY, with characteristic sketches of its cities and scenery. By William Howitt. Price 50 cents.

AN OFFER.—VOLUME FIRST of the American Agriculturist, complete, with title page and index. Price one dollar, stitched. Bound in cloth, \$1 25. Persons paying two dollars, may have the first volume in neatly-bound cloth, and the second volume in numbers, as published.

SAXTON & MILES.

CHARCOAL & CHEMICAL MANURES.

The subscriber has 5 to 1000 bushels of fine Charcoal Screenings, which he offers for sale, at 12½ cents per barrel. He can also supply compound guano manure, and any of the other chemical manures, such as sulphate soda, sulphate of ammonia, &c. He will give estimates of cost of any composition that farmers may require for experimenting, &c., upon application, post paid. Engaged in the chemical manufactures for 30 years past, he feels confident of giving satisfaction in the articles ordered.

April 21.

JOHN BARLING,

Commercial Works, Jane St., between Washington and West streets.

REVIEW OF THE MARKET.

PRICES CURRENT IN NEW YORK, APRIL 25, 1843.

ASHES, Pots, per 100 lbs.....	\$5 12	to \$5 25
Pearls, do.....	6 25	" 7 50
BARK, Quercitron, per ton.....	22 00	" 24 00
BARLEY, per bush.....	48	" 50
BEEF, Mess, per bbl.....	7 50	" 8 00
Prime, do.....	5 50	" 5 75
Smoked, per lb.....	6	" 7
FEESWAX, Yellow, per lb.....	28	" 29
BRISTLES, per lb.....	23	" 65
BUTTER, Table, per lb.....	13	" 15
Shipping, do.....	5 1/2	" 10
CHEESE, per lb.....	5	" 7
CLOVER SEED, per lb.....	8	" 9
CORN, Northern, per 56 lbs.....	58	" 59
Southern, do.....	55	" 56
COTTON, per lb.....	5	" 9
FEATHERS, per lb.....	19	" 27
FLAX, per lb.....	7	" 7 1/2
FLAX SEED, rough, per 7 bush.....	8 75	" 9 25
clean, do.....	9 25	" 9 50
FLOUR, Northern and Western, per bbl.....	4 75	" 5 31
Southern, per bbl.....	4 25	" 4 75
Rye, per bbl.....	3 00	" 3 25
HAMS, Smoked, per lb.....	6	" 7 1/2
Pickled, do.....	4 1/2	" 5
HAY, per 100 lbs.....	45	" 50
HEMP, Russia, clean, per ton.....	200 00	" 205 00
Kentucky, water-rotted, per ton.....	150 00	" 180 00
Do. dew-rotted, do.....	100 00	" 120 00
HOPS, per lb.....	9	" 12
HORNS, per 100.....	1 25	" 5 00
LARD, per lb.....	5 1/2	" 7 1/2
LEAD, Pig, per lb.....	3 1/2	" —
Sheet and bar, per lb.....	4 1/2	" —
MADDER, per lb.....	10	" 13
MEAL, Corn, per bbl.....	2 75	" 3 00
Corn, per hhd.....	12 25	" 13 00
MOLASSES, New Orleans, per gal.....	19	" 21
OATS, Northern, per bush.....	25	" 27
Southern, do.....	20	" 22
OIL, Linseed, per gal.....	85	" 93
Castor, do.....	62	" 70
Lard, do.....	65	" 70
PEAS, Field, per bush.....	—	" —
PITCH, per bbl.....	1 25	" 1 37
PLASTER OF PARIS, ground, per ton.....	2 00	" 2 12
PORK, Mess, per bbl.....	9 00	" 10 00
Prime, do.....	7 00	" 8 00
RICE, 100 lbs.....	2 13	" 3 00
ROSIN, per bbl.....	51	" 1 06
RYE, per 56 lbs.....	65	" 67
SALT, per sack.....	1 40	" 1 62
SHOULDERS, Smoked, per lb.....	4 1/2	" 5
Pickled do.....	3	" 3 1/2
SUGAR, New Orleans, per lb.....	4	" 5 1/2
TALLOW, per lb.....	6 1/2	" 7
TAR, per bbl.....	1 25	" 1 37
TIMOTHY SEED, per 7 bush.....	16 00	" 18 00
TOBACCO, per lb.....	3	" 7 1/2
TURPENTINE, per bbl.....	2 50	" 2 75
WHEAT, Western, per bush.....	1 00	" 1 05
Southern, do.....	90	" 95
WOOL, Saxony, per lb.....	30	" 37
Merino, do.....	27	" 30
Half-blood, do.....	22	" 26
Common, do.....	18	" 22

New York Cattle Market—April 24.

At market, 630 head of Cattle, fresh, (490 from the south,) 75 Cows and Calves, and 200 Sheep.

PRICES.—BEEF CATTLE remain in the same dull state noticed last week. We quote \$4 50 a \$6 50 as the range for good to prime; ordinary to fair \$3 50 a \$4; 125 unsold.

COWS AND CALVES.—Sales of 65 at \$15 to \$20 a \$30, and dull. SHEEP AND LAMBS.—All taken at \$1 76 to \$3 a \$4

REMARKS.—Money is more abundant than ever, and good paper can be readily discounted for 4 1/2 to 5 per cent. Stocks still advancing. U. S. Loan 6 per cent. 1862, we now quote 112 to 113. Other good stocks have advanced in the same proportion.

Cotton has advanced 1/4 of a cent per lb., since the arrival of the Britannia, and an active business is now done in it—8250 bales were sold the past week. Flour and meal, in consequence of large expected arrivals on the opening of western navigation, are not so brisk. Wheat is scarce and much wanted—rye the same—other grain is plenty, and dull. Provisions generally in fair demand—choice mess beef much wanted. We are of opinion that prices will be maintained in most instances, and advance in others, and for further remarks on this subject, we refer to page 42 of this No. of our paper.

The spring still continues cold and backward, and most of the

corn at the south has been cut off by the frosts, and must be re-planted. We fear that this may prove the same at the north this month; and as the corn crop is a very important one with us, we hope that especial attention will be paid to the preparation of the ground, and the selecting of the earliest and best kinds of seed.

THE AMERICAN AGRICULTURIST.

Published Monthly, each number containing 32 pages, royal octavo.

TERMS One Dollar per year in advance; single numbers, Ten Cents; three copies for Two Dollars; eight copies for Five Dollars.

Each number of the Agriculturist contains but One sheet, subject to newspaper postage only, which is one cent in the State, or within 100 miles of its publication, and one and a half cents, if over 100 miles, without the State.

ADVERTISEMENTS will be inserted at One Dollar, if not exceeding twelve lines, and in the same proportion, if exceeding that number.

It Remit through Postmasters, as the law allows.

Editors of Newspapers noticing the numbers of this work monthly, or advertising it, will be furnished a copy gratis, upon sending such notice to this Office.

Volume 1 of THE AMERICAN AGRICULTURIST, with table of contents complete, for sale at \$1; handsomely bound in cloth, \$1 25. It is a neat and tasteful book, and makes a handsome premium for distribution with Agricultural Societies; to which, when several copies are ordered, a liberal discount will be made.

It To prevent confusion, all letters merely ordering this work, or enclosing money for subscriptions, should be addressed to Saxton & Miles, 205 Broadway, post-paid or franked by the Postmaster.

Communications for publication, to be directed to the Editor; and all private letters, or those on business disconnected with the paper, should be addressed, simply, A. B. Allen, 205 Broadway, New York.

The Subscriber will attend promptly to the execution of all orders for the purchase of stock, seeds, agricultural implements, and books. He has been more or less engaged in mercantile pursuits in this city for ten years, and has an extensive acquaintance and thorough knowledge of business in general. Cash or produce must invariably be in hand, before the order can be executed.

A. B. ALLEN, 205 Broadway.

THE FAST-TROTTING HORSE BELL-FOUNDER

Will remain at his old stand, Middletown, Butler Co., Ohio, the ensuing season. He is a bright blood bay, with black legs, mane, and tail; is 16 hands high, and weighs 1,200 lbs. He has trotted his mile in 2 m. 45 sec., and, as a roadster, is unequalled. Several of his colts, just beginning to appear, have proved equal to himself, and have sold from \$150 to \$1,200. This stock is well adapted to the saddle, road, or farm-work, and, for utility, nothing is superior to them. Address Dr. A. Campbell, as above.

April, 1843.

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